



COURSE PLAN

Name of the Course: Quantitative and Experimental Research
Methods in Communication

Year: 2019-2020

Code of the Course: 31748

Term: 1st

Tipology: Compulsory

Number of Credits: 5 ECTS

Student's workload: 125 hours

Teaching Language/s: Spanish / Catalan / English

Lecturers: Laura Aymerich-Franch & Frederic Guerrero-Solé

1. Description of the course

The purpose of the course is to introduce the students to quantitative research methods and tools that will enable them to conduct investigations and perform statistical analyses in the field of communication. The course is mainly focused on the statement of appropriate research questions for quantitative research, the definition of variables, the application of the appropriate statistical methods and the interpretation of the results. A second objective of the course is to introduce students to the statistical software SPSS.

2. Skills

Students should achieve the following skills:

1. Address key questions about communication and formulate the appropriate hypothesis in a quantitative research.
2. Design a quantitative research and integrate it into the appropriate theoretical and methodological frameworks.
3. Clearly state research questions and define variables of the research.
4. Use the appropriate methods for collecting and processing data.
5. Correctly perform the statistical methods learnt, taking into account the research questions and the characteristics of the variables.
6. Extract results and interpret them correctly.



7. Discuss the application of statistical methods and consider the limitations of quantitative studies.
8. Use SPSS to obtain the results required.

3. Content

1. Introduction to quantitative research methods

- 1.1. Principal Quantitative Research Methods: an overview
- 1.2. Research Ethics

2. Planning a quantitative research: phases and main concepts

- 2.1. Theoretical framework
 - 2.1.1. Literature Review
 - 2.1.2. Scientific Papers
 - 2.1.3. Research Databases
- 2.2. Object of Study
- 2.3. Research Questions and Hypotheses
 - 2.3.1. Experiments
 - 2.3.1.1. Variables
 - 2.3.1.2. Experimental design
 - 2.3.1.3. Conducting an experiment
 - 2.3.2. Content Analysis
- 2.4. Data analysis with SPSS
 - 2.4.1. Descriptive Statistics
 - 2.4.2. Inferential Statistics
 - 2.4.2.1. Parametric and non-parametric tests
 - 2.4.2.2. Correlation
 - 2.4.2.3. Chi-square
 - 2.4.2.4. T-test
 - 2.4.2.5. ANOVA
 - 2.4.2.6. Regression
- 2.5. Results report

4. Assessment

Evaluation will be based on a short experimental research project to be presented the last day of the course:

1. Research Questions and Hypotheses (20%)
2. Introduction and State of the Art (10%)
3. Experimental design and Data collection (20%)

4. Statistical analysis and results (30%)
5. Discussion (10%)
6. Project presentation and participation in class (10%)

Works can be individual or in groups (2-3 people).

*There is only one assessment of the final work. A final work cannot be reassessed.

** Students must prove that they have (equally) participated in doing the work by reporting their contribution. If any of the members of a group has not collaborated, he or she won't be assessed.

5. Calendar

Date	Lecturer	Content
30/09	Dr. Aymerich-Franch	Intro Quantitative Research Principal Research Methods Research Ethics Famous Controversial Experiments
7/10	Dr. Aymerich-Franch	Object of Study & Theoretical Framework Literature review, databases, scientific journals
14/10	Dr. Aymerich-Franch	Research Questions & Hypotheses How to conduct experiments Variables Experimental designs Tutoring final project I
21/10	Dr. Aymerich-Franch	Experimental Research Practice I Tutoring final project II
28/10	Dr. Aymerich-Franch	Experimental Research Practice II Tutoring final project III
4/11	Dr. Guerrero-Soler	Content Analysis Tutoring final project IV
11/11	Dr. Guerrero-Soler	Statistical Analysis I Tutoring final project V
18/11	Dr. Guerrero-Soler	Statistical Analysis II Tutoring final project VI
25/11	Dr. Guerrero-Soler	Statistical Analysis III Tutoring final project VII
2/12	Dr. Aymerich-Franch	Final Project Presentation



In the first part of the class we will cover theory, hands-on practice, and debates. The final part of the class (from Class #3) will be dedicated to individual meetings for the final project.

6. Teaching methodology

- Master classes
- Hands-on activities
- Personalized tutoring sessions
- Debates
- Oral presentations
- Tutorials
- Workshops

7. References

7.1. Basic readings

Aymerich-Franch, L., Petit, D., Ganesh, G., & Kheddar, A. (2017). Object Touch by a Humanoid Robot Avatar Induces Haptic Sensation in the Real Hand. *Journal of Computer Mediated Communication*, 22(4).

Allen, M., Titsworth, S., & Hunt S. K. (2009). *Quantitative Research in Communication*. London: Sage.

Berger, A. A. (2000). *Media and Communication Research Methods: An Introduction to Qualitative and Quantitative Approaches*. London: Sage.

Bericat Alastuey, E. (1998). *La integración de los métodos cuantitativo y cualitativo en la investigación social: significado y medida*. Barcelona:Ariel.

Igartua, J. J. (2006). *Métodos cuantitativos de investigación en comunicación*. Barcelona: Bosch. Retrieved from http://cataleg.upf.edu/record=b1376331~S11*cat

Lewis-Beck, Michael S. (ed.) (1993). *Experimental design and methods*. London: Sage.
Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using*

SPSS for Windows (Version 12). Maidenhead : Open University Press

Pérez López, C.(2009). *Técnicas estadísticas multivariantes com SPSS*. Madrid:Garceta.

Wagner, W. E. (2011). *Using IBM SPSS Statistics for Social Statistics and Research Methods*. London: Sage.

7.2. Other readings



Denham, B. E. (2002), Advanced Categorical Statistics: Issues and Applications in Communication Research. *Journal of Communication*, 52:162–176. doi: 10.1111/j.1460-2466.2002.tb02537.x

Dilenschneider, R. L. (2010). *The AMA handbook of public relations: Leveraging PR in the digital world*. New York: Amacom.

Guerrero-Solé, F., Corominas-Murtra, B., & Lopez-Gonzalez, H. (2014). Pacts with Twitter. Predicting voters' indecision and preferences for coalitions in multiparty systems. *Information, Communication & Society*, 17(10), 1280-1297. doi:10.1080/1369118X.2014.920040

Guerrero-Solé, Frederic; Besalú, Reinald; López-González, Hibai (2014). Save me, save them! Trash Talk Shows and the Third-Person Effect. *Communications, The European Journal of Communication Research*, 39 (2), 193-214.

Guerrero-Solé, F. (2013). El efecto tercera persona en el caso de los medios, la publicidad y contenidos controvertidos. *Trípodos*, 33, 121–132.

Heath, R.L. (2013). *The encyclopedia of public relations*. Thousand Oaks, CA: Sage.

Igartua, J.-J., & Cheng, L. (2009). Moderating effect of group cue while processing news on immigration: Is the framing effect a heuristic process? *Journal of Communication*, 59, 726–749. doi:10.1111/j.1460-2466.2009.01454.x

Jin, Y., Pang, A., & Cameron, G. T. (2012). Toward a Publics-Driven, Emotion-Based Conceptualization in Crisis Communication: Unearthing Dominant Emotions in Multi-Staged Testing of the Integrated Crisis Mapping (ICM) Model. *Journal Of Public Relations Research*, 24(3), 266-298. doi:10.1080/1062726X.2012.676747

Kim, Jeesun, Hyo Jung Kim, and Glen T. Cameron. 2012. "Finding Primary Publics: A Test of the Third-Person Perception in Corporate Crisis Situations." *Journal Of Public Relations Research* 24, no. 5: 391-408.

Kim, Y., & Choi, Y. (2012). College Students' Perception of Philip Morris's Tobacco-Related Smoking Prevention and Tobacco-Unrelated Social Responsibility. *Journal Of Public Relations Research*, 24(2), 184-199. doi:10.1080/1062726X.2012.626138

Knobloch-Westerwick, S. (2012), Selective Exposure and Reinforcement of Attitudes and Partisanship Before a Presidential Election. *Journal of Communication*, 62: 628–642. doi: 10.1111/j.1460-2466.2012.01651.x

Lopez-Gonzalez, H., Guerrero-Sole, F., & Haynes, R. (2012). Manufacturing conflict narratives in Real Madrid versus Barcelona football matches. *International Review for the Sociology of Sport*, 1012690212464965–. doi:10.1177/1012690212464965



Ruiz, C.; Masip, P.; Micó, J.; Díaz Noci, J. y Domingo, D., "Conversación 2.0. y democracia. Análisis de los comentarios de los lectores en la prensa digital catalana." en: *Communication and Society/Comunicación y Sociedad*, vol. XXIII, n. 2, 2010, pp.7-39.

Sauro, Jeff; Lewis, James R. (2012). *Quantifying the user experience: Practical statistics for user research*. Elsevier.

Sriramesh, K. & Verčič, D. (2009). *The global public relations handbook: Theory, research and practice*. New York: Routledge.

Theaker, A. (2004). *The public relations handbook (2nd edition)*. London: Routledge.

Ye, L., & Ki, E. (2012). The Status of Online Public Relations Research: An Analysis of Published Articles in 1992–2009. *Journal Of Public Relations Research*, 24(5), 409- 434. doi:10.1080/1062726X.2012.723277.

7.3. Web resources

Llopis Pérez, Jaume. La estadística: una orquesta hecha instrumento.

<http://estadisticaorquestainstrumento.wordpress.com/>

UOC. Proyecto E-MATH. Uso de las TIC en asignaturas cuantitativas aplicadas.

<http://www.uoc.edu/in3/e-math/>

Web Center for Social Research Methods. <http://www.socialresearchmethods.net/>