**ELT-535 / SCIENTIFIC RESEARCH METHODS & ETHICAL ISSUES II (2024-2025 Spring)**

**COURSE REQUIREMENTS AND ASSESSMENT**

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**TENTATIVE WEEKLY TOPICS**

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|  |  | **Preparation** | **Assignment & Assessment** |
| 27 Feb | -Procedure-Intro to Quantitative Research Methods-Specifying the Purpose and Research Questions/Hypotheses | Chp. 3  |  |
| 04 Mar | -Sampling -Survey Research-Questionnaires | Chp. 6 |  |
| 11 Mar | -Non-experimental Research-Descriptive Statistics-Analyzing survey research articles -Working on Tables for descriptive findings | Chp. 7 |  |
| 18 Mar | -***Group Discussions on possible research topics*** (You will discuss in groups possible strengths and weaknesses of your topic for the project) | Write your purpose statement and research questions/hypotheses to discuss in small groups | Group Work |
| 25 Mar  | -Using Excel & SPSS for descriptive statistics | Make sure you have SPSS in your computers |  |
| 01 Apr(26 Mar make-up) | -Practicing SPSS for descriptive statistics | Make sure you have SPSS in your computers |  |
| 08 Apr | ***In-class task 1 (descriptive statistics using SPSS)*** | SPSS in your computers | In-Class Task (25pts) |
| 15 April | -Experimental Studies-Statistical techniques used for experimental studies (parametric & non parametric)  | Chp. 11 SPSS in your computers |  |
| 22 April  | -Practicing SPSS to compare groups (t-test; ANOVA; non-parametric statistics)--Writing methodology section  | SPSS in your computers |  |
| 29 April | *Introduction + Methodology Individual Feedback*  | Send your intro+method to sehnazkarakas@cag.edu.tr **until 25th April** | Individual Feedback |
| 06 May | -Correlational Studies-Causal-Comparative Studies-Statistics for correlational and causal-comparative studies-Chi-Square-Working on tables for inferential statistics | Chp. 10Chp. 12 |  |
| 13 May | -Practicing SPSS for correlational studies (Pearson r)  | SPSS in your computers |  |
| 20 May  | -Practicing SPSS for all inferential statistics | SPSS in your computers |  |
| 27 May | ***In-class task 2 (Inferential statistics)*** | SPSS in your computers | In-Class Task(25pts) |
| 03 June  | -Ethical Issues in Quantitative Research-General Quiz for Quantitative Research Methods |  |  |
| 12 June | Project Submission  |  | Final-Project (50ps) |

**Course Book**

McMillan, J., & Schumacher, S. (2014). *Research in education: Evidence-based inquiry*. Pearson

**Reference Books**

Brough, P. (2019). *Advanced Research Methods for Applied Psychology: Design, Analysis & Reporting*. Routledge, Taylor & Francis.

Bryman, A. (2008). *Social Research Methods*. OUP

Fraenkel, J. R. & Wallen, N. E. (2006). *How to Design and Evaluate Research in Education*. McGraw Hill

**COURSE ASSESSMENT POLICY**

1. In line with Çağ University’s attendance policy, you are expected to attend **at least 70%** of the class sessions, but you are advised to attend all the classes to participate in classroom interactions.
2. **PLAGIARISM**: All the sentences in your assignments must be original (must belong to you). They will be carefully checked on Turnitin (**AI-generated content will also be checked**!!); In case of plagiarism or cheating, you may be given an FF for the assignment or the whole course; you may even be subject to disciplinary action. For my course, you are **NOT ALLOWED more than 20%** of similarity in plagiarism check (including citations and references). But even if it is below 20% and if AI is used, I will **still accept it plagiarized** if the matching text is **one continuous block** of the original text.
3. This semester you are supposed to submit two tasks: (1) in-class tasks and (2) a research project.

**1- In-class tasks (50%)**

There will be 2 in-class tasks. These tasks will be carried out **in the class time and be sent to sehnazkarakas@cag.edu.tr by the end of that class time**. You can work in pairs or groups of 3 or 4.

***Tasks:***

a) descriptive statistics using SPSS (April 10th) ***(25pts)***

b) inferential statistics (June 12th) ***(25pts)***

**2- Research Project (50%)**

For this task, you will conduct a quantitative research study and write a SHORT ARTICLE. You will submit your Short Article in two pieces: (i) Introduction and Methodology to receive feedback from me before starting to collect data, which should be completed until May 10th ***(This will not be marked but affect the process of assessment in total)***; (ii) Revised introduction+Methodology and Results+Conclusion. Your research may use any of the following:

-Survey research

-Correlational research

-Experimental research

-Causal-comparative research

***a) Introduction + Methodology (May 1st)***

Your **introduction** should include the following:

1. purpose of your study
2. research question(s) / hypothesis
3. importance of the study
4. brief summary of the theoretical approach (supported with 3-4 scientific studies)

Your **methodology** should include the following:

**Research Design**: Write what research design you have used (e.g. experimental, survey-based, etc.). While writing the research design, use specific terms related to the design.

**Participants**: Write who your participants are. Give information about them (e.g. age, education, etc.). Write your sampling procedure (what sampling method you are planning to do, why, etc.)

**Instrumentation**: Write what instrument(s) you have used. Describe your instrument as clearly as possible. Write how it is relevant to your study. Give the instrument as Appendix. Also write the variables (if appropriate) in this section.

**Procedural** **Details (if needed)**: Write in detail the procedures you have followed (what you have done, when, where, how)—This is a must if it is an experimental study.

**Data** **Analysis**: Write how you have analyzed the data. Write each analysis method separately and give as much information as possible.

**Reliability**: Write how you have eliminated possible threats to the reliability of your study.

* You will send this to **sehnazkarakas@cag.edu.tr** until the deadline to receive individual feedback.

***b) Full Research Study (June 17th)***

You will send your **full research study** to **sehnazkarakas@cag.edu.tr**

**This final submission will be scored but process will affect the general score.**

Your submission will include the following:

-**Revised Introduction + Methodology Sections**

-**Results**: Write what you have found out in accordance with the aim and research questions presented in Introduction section; Make sure you have written the findings in an organized way and using appropriate statistical techniques. Use tables when necessary.

-**Conclusion**: Write a short summary of the findings and your discussions related to these findings.

**-LATE SUBMISSIONS without prior approval by me will NOT be accepted.**

**STUDENT PERFORMANCE SHEET**

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| --- | --- | --- | --- |
|  | **Objectives (Learning Outcomes)** | **In-class Tasks** | **Research Study** |
|  |  | **1** | **2** | **Part I** | **Part II** |
| 1. | comprehend the nature of quantitative research. | X | X | X | X |
| 2. | develop research questions and hypotheses. |  |  | X |  |
| 3. | conduct quantitative research. |  |  |  | X |
| 4. | conduct a search of the literature on a topic of their interest. |  |  | X |  |
| 5. | distinguish between various sampling methods used in quantitative research. |  |  |  | X |
| 6. | construct different data collection instruments for quantitative research. | X | X |  | X |
| 7. | justify the importance of reliability and validity in quantitative research. | X | X |  | X |
|  |  | **25** | **25** | **50** |

**Rubric for In-class Tasks**

|  |  |  |  |
| --- | --- | --- | --- |
| Tables | **(5-4)**Well-prepared table(s) (all info present and APA formatted) | **(3-2)**Some problems in the table (either in info or APA) | **(1)**Table not clear  |
| Use of analysis | **(6-5)**Correct and full use of statistical tecniques | **(4-3)**Some problems in the use of statistical techniques | **(2-1)**Many problems in statistical techniques |
| Describing the analysis | **(8-7)**To the point; not overlapping; findings in the table are clearly explained | **(6-4)**To the point; some overlapping; some findings are not clearly explained | **(3-1)**Not to the point;Misinterpretation |
| Organization & Language | **(6-5)**Well-prepared; Well-organized;Command of Academic Language | **(4-3)**Some organization problems;Some problems in language | **(2-1)**Not well-prepared;Lots of problems in language |
| TOTAL | **25** |  |  |

**Rubric for Research Study**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Process** | (8-7 pts)-did all the work on time; -took into consideration the feedback-was a fully active participant | (6-4 pts)-late submission of at least one task on time-OR did not consider all the feedback-was active time to the time | (3-1 pts)-missed submission of more than one task -AND/OR did not consider most feedback-was not active at all |
| **General** | (8-7 pts)-paper is logical and organized. -Sentences are well-phrased and varied in length and structure. -Word choice is consistently precise and accurate. -The writing is free of errors in grammar, spelling and writing mechanics.  | (6-4 pts)-paper is generally logical and organized. -Sentences are well-phrased and vary in length and structure. -Word choice is generally good and mostly precise and accurate.-There are occassional errors in grammar, spelling and writing mechanics.  | (3-1 pts)-paper lacks logical progression or organization. -Sentences are awkward and often unclear. -Word choice is acceptable but range of words is limited or lack precision. -The writing has many errors which impact the understanding of the report.  |
| **Intro** | (6-5 pts)-well-stated purpose & significance supported with good quality sources-well-developed research questions (RQs) | (4-3 pts)-purpose and/or RQs present but not well-developed-OR well-developed purpose and RQs but not supported with sources  | (2-1 pts)-problems in stating the purpose and/or research questions |
| **Methodology** | (10-8 pts)-all necessary info given effectively and in an organized way | (7-4 pts)-some info missingAND/OR all info is present but with some vagueness | (3-1 pts)-descriptions are not clear AND/OR lots of info missing or not organized |
| **Results and Discussion** | (10-8 pts)The results are accurately stated, accurately explained and analyzed, and accurately show a clear understanding of terms and concepts used in the course. | (7-4 pts)The results are accurately stated, partially explained and analyzed, and show some understanding of terms and concepts used in the course. | (3-1 pts)The results are inaccurate and/or non-existent. |
| **APA** | (8-7 pts)-no problems in APA | (6-4 pts)-some APA problems | (3-1 pts)-many APA problems |
| **Total** | 50 |  |  |