The programme of study
at the Doctoral School of Social Sciences

The programme of study assumes that each PhD student will have an opportunity to follow a complete learning pathway in English.

The duration of the programme is eight semesters.

I. General university classes for all PhD students

No.	Name	Number of compulsory hours	Number of voluntary hours	Semester	PRK
1.	Academic teaching	30		I	UK_1, UK_2, UK_3, UU_1, UU_2
2.	Ethics	8		I	WG_2, KO_1, KO_2, KR_1
3.	Copyright	4	4	I	WK_4, WG_2, KO_2, KR_1
4.	Grant applications (scholar's workshop)	6+2	4	III	WK_3, WK_4, UW_2, UK_4, UO_1, UU_1, KK_2
5.	Public speaking (scholar's workshop)		8 (4 + 4)	III	UK_1, UK_5
6.	Knowledge transfer (scholar's workshop)	4		V	WG_2, WG_3, UW_3, UK_2, KK_3, KO_1, KO_2, KO_3

Description of the subjects:

1. **Academic teaching (30 hours, I semester)**
   Classes aimed at increasing the knowledge and skills of PhD students in the area of planning pedagogical work, analysing and assessing the course of educational processes, as well as determining and assessing their effects. The discussion will encompass issues concerning the correctness and conditions of the teaching-learning process.

2. **Ethics (8 hours, I semester)**
   The lecture presents the main issues related to academic ethics, with account being taken of it role in contemporary moral thinking. The material content of the lecture will encompass the analysis of basic concepts and methods used in this area, as well as the presentation of the great normative theories. The classes will feature discussions of concrete examples of applying ethical principles in practice.

3. **Copyright (4 hours, I semester and 4 voluntary hours, I semester)**

Providing the PhD students with the fundamental knowledge on copyright and neighbouring rights with reference to research and didactic activities. As a result, the PhD student will acquire knowledge on plagiarism and the rules of properly using other people's achievements.

4. **Grant applications (scholar's workshop) – 6 + 2 hours, III semester and 4 voluntary hours, III semester**
   The aim of the classes is to provide the PhD students with knowledge on the principles of constructing research projects financed from external sources. The PhD students will acquire the skill of effectively drafting grant applications, which will increase the percentage of positively examined applications. Six hours of the classes will be dedicated to the principles of applying for grants and two hours to how they should be settled.

5. **Public speaking (scholar's workshop) – 8 voluntary hours, III semester (4 hours in Polish, 4 hours in English)**
   The classes aim at increasing the skills of PhD students in the area of public speaking by teaching them the principles and good practices that should accompany the preparation and delivery of speeches. The PhD student will become familiar with the theory and practice of effective public speaking.

6. **Knowledge transfer (scholar's workshop) – 4 hours, V semester**
   Classes that develop the knowledge sharing skills. Their aim is to become familiar with the possibilities of knowledge transfer from a higher education institution to enterprises, public institutions and non-governmental organisations. The "know-how" is unique and specific for a given organisation (e.g. a higher education institution). The "know what", on the other hand, includes definitions of concepts, descriptions and professional terminology. The transferring methods may differ depending on the nature of the knowledge to be transferred and its recipients.

II. Classes organised by the school for all PhD students

No.	Name	Number of compulsory hours	Number of voluntary hours	Semester	PRK
1.	Methodical teaching workshop (group)	4	4	II	UK_2, UK_3,UU_2
2.	Methodical teaching workshop (individual as part of internship)	4		II	UK_2, UK_3,UU_2
3.	Workshop – academic writing in social sciences	15		II	WK_3, WK_4, WG_3, UW_1, UW_2, UK_2, UO_1, UU_1, KK_2
4.	Academic development – individual classes with the supervisor (scholar's workshop)	15		II and III	WG_1, WG_2, WG_3, UW_1, UW_2, UO_1, KK_1, KK_2

5.	Methodological classes to be selected from the list	60		II, III, IV	WK_3, UW_1
6.	Interdisciplinary conference	15		III	UW_1, UW_2, UK_1, UK_3, UK_4, UU_1, UU_2, KK_1, KK_2
7.	Interdisciplinary conference	15		V	UW_1, UW_2, UK_1, UK_3, UK_4, UU_1, UU_2, KK_1, KK_2
8.	School seminar	32		II, III	WK_1, WK_2, WG_1, UK_1, UK_4, UK_5, KK_1
9.	Discipline seminar	16		III	WK_1, WK_2, WG_1, UW_2, UK_4, KK_1
10.	PhD student seminar	10-30		VI	UW_1, UW_2, UK_1, UK_3, UK_4, UU_1, KK_1, KK_2
11.	Specialisation classes offered by the particular disciplines	30	30	II, III, IV, V, VI, VII, VIII	WK_1, WK_2, WK_3, UK_5

Description of the subjects:

1. and 2. Methodical teaching workshop

- **group (4 hours, II semester and voluntary 4 hours, II semester);**
- **individual as part of internship (4 hours, II semester)**

The methodical workshops are aimed at preparing the PhD students for independent teaching of classes in a higher education institution. They consist of:
(1) group workshops – (in a group of PhD students of the same discipline) class visitations conducted by the best educators. To the extent possible, these classes have different forms (lectures, practical classes, colloquia). The class visitation is carried out under the supervision of the lecturer licensed in pedagogy and encompasses not only participation in classes but also discussion of the classes observed (in total, at least 4 hours, including 2 hours of visitation). The visitations will be mostly held in the “focus room” (available at the Faculty of Management and the Faculty of Philosophy and Sociology), which allows for the observation of classes and simultaneous comments by the workshop’s participants,
(2) individual workshops – at least 2 hours of classes taught by the PhD students under the supervision and in the presence of an eminent educator or supervisor (plus an hour for joint preparation and an hour to discuss the classes, so this form encompasses in total at least 4 hours of classes counting as didactic internship hours).

3. Workshop – academic writing in social sciences (15 hours, II semester)

The classes are intended to enrich the scholar's techniques and skills, helping to prepare applications for research financing and articles summarising the results of the research conducted, as well as developing a PhD student's publishing strategy. The offer includes several courses conducted by various experienced academics. Each PhD student chooses a course s/he wants to attend.

PLEASE NOTE: the particular courses are started if they have been selected by at least 5 PhD students.

Subjects to choose from:

1) **Article composition and publishing strategies** (several simultaneous groups)

The course is aimed at making the PhD students familiar with the publication practices in social studies and equipping them with the skills useful in their own publication activities. Real examples will be used to discuss the basic rules of writing and submitting scientific articles for publication and reviews, as well as the most important databases and tools making it possible to find one's bearings in the international scientific circles. The discussion will also be dedicated to the role of bibliometric indices and their alternatives in the contemporary evaluation systems of scientific activity, as well as their impact on the publishing strategies of scientific institutions and individual researchers. The most important issued under discussion include: (1) Publish or perish – contemporary forms of scientific communication, (2) Repositories, databases of scientific journals, DOI and tools for bibliography management, (3) The basic bibliometric indices and their limitations, (4) An overview of publication benchmarks in the sub-disciplines (of the participants), (5) A systematic literature review and the monitoring of new publications, (6) The publication cycle: from an idea for an article to manuscript submission, (7) The publication cycle: from manuscript submission to the first citation, (8) Peer review, (9) Legal and ethical dilemmas: good and bad publishing practices.

2) **Article composition and publishing strategies II**

The aim of the course is to explain the issues related to harmonious development of an academic career. The presentation of the requirements under the Polish law will be followed by demonstration of proposals for a publishing strategy in the context of evaluating the quality of scientific activities. The participants will become familiar with the methods for verifying citations, the h-index, as well as with how to ensure that their own research works are visible. Besides the list of journals and publications of the Ministry of Science and Higher Education (MNiSW), lists will be shown related to the SCOPUS database and the WoS Index. Discussion will be dedicated to the role of scientific monographs and to the international assessment criterial of scientific journals (SCOPUS, COPE, IF, SNIP). The procedure of submitting and assessing an academic article will also be discussed, as will be the issues related to the preparation and fulfilment of scientific projects, including the indication of financing entities (UE, NCN, NCBiR, NPRH, NATO). The discussion will also include the formal requirements for preparing applications, contest documentation, assessment criteria, application structure, reporting and the rules of structuring the final report. The participants become familiar with the EURAXESS website and the essence of research result commercialisation.

3) **Paper writing: from first ideas to successful submission**

This workshop will teach PhD students how to successfully communicate the results of their research on a particular topic to the academic audience as well as aiming to help them to improve their writing skills. It will offer its participants the opportunity to work on their own academic papers and develop them from first ideas to early drafts. After choosing the topic of their papers and framing them, the attendees will be assisted in developing a detailed outline of their work by the teacher and through peer support. The students will learn how to properly structure their papers, develop the required sections, select sources and prepare the content. The workshop will also present the features of academic style and the recommended ways of

referencing and formatting. The students will be advised how to choose a proper academic outlet and an effective publication strategy for their planned papers. They will learn about a reviewing process to be able to critically assess their work and deal effectively with future reviews. The article outlines can be prepared by the students either in English or in Polish. (The module taught in English).

4) Contract- and competition-based research

The classes are conducted on a workshop basis and concern the organisation of the technique and skills of a researcher working in the area of practical applications of the knowledge from social studies. During the classes we learn, amongst others, to formulate research problems combining academic knowledge with socio-cultural practices, to search for contracts and contests, to use conclusion generators (amongst others, substantive contents on a limited space, schedules, cost estimates), team and individual work, cooperation with principals, the rules of carrying out research, the structure of research reports, the diagnoses and evaluations, as well as practical recommendations. The class materials include both the research projects already completed and current contests, as well as the participants' own projects.

5) Academic writing workshop – from research report to essay

While presenting the results of our research, we often do it "intuitively" or by imitating other researchers, without thinking about the communication effectiveness. This is what generates incoherent and informationally overloaded conference presentations, doctoral dissertations devoid of any clear structure and research reports written in a convoluted language. During the classes, the participants will practice the basic skills related to the communication of research results: adding a legible logical and narrative structure to the text or presentation, using the tools for quantitative and qualitative data analysis, describing, analysing and summarising results with a suggestive and precise language adjusted to the group of recipients.

6) Writing grant and scholarship applications

The classes concern the preparation of grant and scholarship applications, i.e. the activities that have become an essential component of a scientific career and as such are complementary to the course conducted by the Research Services Office (BOB). During the workshops, we will be analysing the applications that received funding; consider what makes a good application and – based on the experience of researchers who acquire grants – consider how such applications are created. We will also discuss reviewers' comments and think about ways to avoid their devastating criticism.

7) Systematic overviews of scientific literature

The aim of the classes is to teach the students to perform systematic, in-depth reviews of sources (scientific literature, the available research results) using various bibliometric and bibliographic databases (Web of Science, Scopus, and others) and using QDA (Qualitative Data Analysis) software. The classes with be conducted in the form of a lecture combined with practical classes. The lecture will make the students familiar with the procedure of conducting systematic reviews of sources, including the methods of using bibliometric and bibliographic databases, as well as the examples of model reviews. During the practical section, each student will complete an individual project – a systematic literature overview from a selected range of topics. This will result in a synthetic (up to 5,000 characters) study of the main research trends within a given scientific problem/issue, organising the effect of the available research and identifying research gaps. To pass the classes, it is required to be familiar with the assigned books and fulfil a project – a literature review in a manner required by the tutor or with the use of the recommended tools. Knowledge of bibliographic databases is not a prerequisite to participation in the classes, but basic knowledge of the QDA software is required.

4. Scientific development – individual classes with the supervisor (scholar's workshop) – 15 hours, II and III semester

Individualised classes, tailored to the specificity of a given PhD student and the dissertation s/he is preparing. They encompass both issues of a workshop nature (e.g. the selection of relevant research methods) and discussions on the current state of knowledge in the discipline as well as in the research questions and hypotheses formulated on this basis in the dissertation. The classes may also encompass works on the preparation of an application for a research grant.

5. Methodological classes to be chosen by the PhD students (60 hours to choose, II, III and IV semesters)

The School offers a set of 20-hour specialist courses of which three must be passed by the PhD students (the total of 60 hours). Moreover, each PhD student has the right to choose *any* two courses from the set (not necessarily those offered by his/her own discipline). However, the choice of methodological classes must be agreed with the supervisor. The particular disciplines may include subjects which are compulsory to pass.

At the request of the Chairperson of the Scientific Council of the Discipline, the Scientific Council of the Fields, the PhD Student Self-government or the Head of the Doctoral School, it is possible to add or remove methodological classes. Such a change must be approved by the Board of the Doctoral School.

The Individual Research Plan will specify the classes to be fulfilled by a given PhD student.

The list of classes to choose from can be found at the end of this appendix.

PLEASE NOTE: the particular courses are started if they have been selected by at least 5 PhD students.

6. and 7. Interdisciplinary conference (30 hours – 15 hours III semester, 15 hours V semester)

The interdisciplinary conference (the PhD student's meeting) is oriented towards both content-related objectives and the creation of an integration space for the PhD students from the different disciplines represented in the school. It is held in the form of a visiting seminar lasting two full days. During the seminar, the PhD students have an opportunity to present their own research projects and discuss them with other PhD students and researchers. In order to allow enough time for the presentations and discussions, the work is organised into four simultaneous seminar sections (by analogy with the organisation of a considerable number of scientific conferences).

8. School seminar (32 hours – 16 hours II semester, 16 hours III semester)

The seminary is of an interdisciplinary nature and is dedicated to all the PhD students of the School. During the seminar, the most interesting research will be presented that goes beyond the narrow confines of a single discipline, as carried out by the particular disciplines within the school. Some meetings will be dedicated to the presentations by eminent representatives of social studies, invited to the seminar from outside the University of Warsaw (including foreign universities).

9. Discipline seminar (16 hours, III semester)

The seminar is organised separately for the students of each scientific discipline. It is intended to discuss selected, most important scientific texts and research for a given discipline. PhD students take active part in presenting and discussing selected issues. The particular meetings may be conducted by various researchers specialising in the particular research problems under discussion. The whole seminar is coordinated by an employee responsible for the given subject.

10. PhD student seminar (10-30 hours, VI semester)

The PhD student seminar is organised separately within each of the disciplines represented in the School. During the seminar, each PhD student has an opportunity to present the results of his/her research and discuss them with other PhD students and researchers of the University of Warsaw. Placing the seminar in the VI semester makes it possible, on the one hand, to present mature (encompassing a significant part of the results) research projects and, on the other, to introduce potential corrections resulting from the discussions held during the seminar. Depending on the group size of the PhD students within a given discipline, the number of hours will differ. When the number of the PhD students in a given discipline exceeds 12 (potentially, this situation applies to legal science, political and administrative science, as well as to economy and finance), the seminar may be held in two simultaneous groups.

11. Specialisation classes offered by the particular disciplines (30 hours between II and VIII semesters)

Specialisation classes to be selected from the range offered in a given semester by the particular disciplines (the PhD students are not limited to choose the classes only from their own discipline). The PhD students are obligated to complete 30 hours (two courses of 15 hours each) of such classes during semesters II-VIII (the precise time limit for their completion is an individual decision of each PhD student). The number of hours may be increased in selected disciplines.

PLEASE NOTE: the particular courses are started if they have been selected by at least 5 PhD students.

Upon simultaneous consent of the supervisor and the school manager, certain specialisation classes may be passed through participation in renowned summer schools (including those conducted by international scientific organisations) or in the form of scientific internship.

III. Internship

Form of internship

The recommended number of hours of didactic internship is 90, with the minimum being 30 hours and the maximum – 180. The internship may be commenced not earlier than during the II semester (after completing the first classes in higher education didactics).

Some internships have the form of individual didactic workshops described above. The remaining internship hours may be completed by the PhD student's participation in classes taught by the supervisor or the appointed educationalist, as well as in the form of classes taught by the PhD student himself/herself.

Learning outcomes::

WG.2, WG.3, WG.4, UW.3, UK.2, UK.3, UU.1, UU.2, KO.1, KO.2, KR.1

Recommendation – from 90 to 180 hours
Minimum – 30 hours

The list of methodological classes offered by the particular disciplines

The list of additional **compulsory** classes for the PhD students within the framework of the particular disciplines can be found at the end of the list.

1) Causality in social studies

The classes will encompass both theoretical issues (the ways of defining causality) and concrete methods for estimating "causal effects".
Discovering *causal link* is often considered to be one of the fundamental objectives of science, at least to the extent where it refers to qualitative research. However, not all the links that we note can be defined as causal. What criteria can be adopted to identify causal relations? How does it affect the possibilities (and limitations) for interpreting the results obtained? In order to answer these questions, the classes will discuss the most important theories defining the concept of causal links, referring to quantitative social studies: the Neyman–Rubin (Rubin–Holland) causal model, the econometric approach represented by Heckman, and the theory of the Structural Causal Model by Pearl. As analysis will be made of the similarities (particularly with reference to the concept of *potential outcomes*) and differences between those theories as well as of the related implications for the possibilities of treating various schemes of research and quantitative analysis in social studies, as the ones which allows for the identification of causal interactions.

2) Theoretical paradigms of social sciences

The aim of this course is to prepare the PhD students for the performance of theory-oriented scientific research. It is generally recognised that that conscious, active and consistent use of scientific theories proves the scientific advancement and maturity. At the same time, it is believed that PhD dissertations do not sufficiently meet this criterion. Therefore, it is necessary to draw attention to the important role played by the theoretical perspective for the entire structure of a doctoral dissertation, to the main contemporary theoretical paradigms, disputes, dilemmas and choices faced by the researchers in social studies. The point is to delineate a certain roadmap with which each PhD student will be able to independently move around after completion of the course, in order to solve his/her own research dilemmas. In each case, the analysis of the bases and assumptions behind a given approach will be illustrated with examples of their application in scientific literature.

3) The most important problems of today's world. The geographical perspective

A colloquium aimed at presenting the meaning of spatial conditions for the life on Earth. The subjects discussed will refer to social, economic and environmental phenomena commonly recognised as a threat to or challenge for mankind. The concrete topics will be selected according to the participants' interest and the current events in the world. The discussion will be based on the speeches by experts or on current scientific contributions concerning a given issue.

4) Contemporary political analysis

The subject is intended to deepen the theoretical and methodological knowledge of the PhD students concerning the political analysis of contemporary socio-political issues. The course participants develop their skills concerning the conceptualisation and operationalisation of the basic concepts (e.g. politics, political authority, political decision, political institution, political system, political regime, democracy, etc.) and their use in research. Moreover, they gain knowledge on the most important scientific disputes and debates concerning the study of socio-political issues (amongst others, the structures vs. "the agents"). They will also become familiar with the methods for analysing/measuring such key issues as the political role, the political influence and the political change.

5) Theory established in organisation research

This course will allow the reader to grasp the essential elements of grounded theory – a research strategy particularly suitable for the exploration of problems related to the perception of social phenomena rather than for the study of the "objective" reality. The course will provide an overview of the central concepts of the grounded theory (inductive approach, coding strategies, theoretical sampling) and explain the most important differences between the grounded theory and other research strategies.
(The module taught in English).

6) Statistical methods in social studies

The classes are dedicated to the application of statistical analysis methods to the interpretation of the quantitative results of social studies, preparing the participants to make direct use of the results of the most important research fulfilled in Poland (such as ESS, EVS, POLPAN, PISA, PIAAC and others) in their scientific work (including the preparation of the doctoral dissertation), as well as to properly plan and interpret their own research. They will take into account the issues of measurement, scaling, description of dependencies, selection of a sample and its meaning for statistical inference.

7) Advanced statistical methods

The classes will primarily focus on the issues of regression models. They will start from a simple model of linear regression for quantitative variables and its main assumptions, only to concentrate on the modelling of a different type of variables (including discrete ones, having the form of a natural number). Discussion will also be dedicated to regression schemes for quasi-experimental data, e.g. fixed-effects models. The course will also teach how to clearly present the results of statistical analyses, especially for non-linear models.

8) Research programming in PsychoPy

The aim of this course is to provide you with the skills to program experiments using the Python programming language and the PsychoPy experiment building package. PsychoPy is an open-source alternative to software such as Eprime, Superlab, Presentation, and Inquisit. Basic programming concepts will be covered initially, followed by application of these concepts in successive examples of experimental paradigms. Experiment designs will be primarily based on those coming from cognitive psychology, but the lessons can be applied to any situation in which something must be presented on screen and responded to. Emphasis will be placed on methods of randomization, presentation, and timing. The course is crucial for psychologists, but it could be attractive also for the PhD students of pedagogy, economics, management and perhaps other social sciences.

9) A new source of information. Big Data

Almost all the information generated in the world is stored digitally. Resources of this scale are referred to as Big Data. The analysis – the refinement (sentiment analysis, elements of artificial

intelligence) of this information – represents a new source of valuable information for the science, business, journalism and other fields.
Objectives:
1) Big Data refinement. Presenting a set of tools (procedures, software) for Big Data refinement. These tools may provide a picture of the phenomenon under analysis: in the past, in real time, as well as by predicting its changes in the future.
2) Commercialisation of the use of Big Data resources in social studies and business.
2) Presentation of practical applications for the Big Data refinement.

10) Working on a doctoral dissertation in legal studies: methodological remarks

The classes are dedicated to various methodological issues concerning the preparation of a doctoral dissertation and the legal regulations pertaining to PhD studies from the perspective of different studies of law, including but not limited to civil law, European law and international law. The requirements towards both the PhD students and their doctoral dissertations, as well as the course of the PhD studies will be presented. The content-related issues concerning the work on a doctoral dissertation will be treated dynamically – from the selection of the dissertation title and research methods, through the methods for acquiring the material, its selection and processing, to the preparation of the dissertation itself. Particular attention will be paid to the electronic databases, to the unacceptable phenomenon of plagiarism and ghost-writing, to the formal issues, including but not limited to making references to various types of sources in the footnotes and bibliography. The lectures will revolve around the evolution in the approach to the subject matter and methods of the study of law in Europe (in comparison to the USA). The questions posed are as follows: has the study of law become “Americanised”, do the theoretical, contextual and interdisciplinary analyses dominate, what trends are dominant in Poland – in a word, what do we deal with and why? The repertoire of methodological approaches available for a lawyer/scientist: examples of research projects and the dogmatic, theoretical and empirical methods used in them. Case-study: a short analysis of the methods published in sample doctoral dissertations.

11) The use of computer programmes in collecting and analysing qualitative data

The aim of the course is to make the PhD students familiar with the main functions of the Atlas.ti computer application that supports the analysis of qualitative data. The classes will be taught in the form of a workshop. The theoretical introduction into the specificity of qualitative research will be followed by a discussion on the following issues: conducting an inductive/deductive dialogue in the Atlas.ti programme; creating a hermeneutical unit; working with the research material: coding, auto-coding; creating links between and defining fragments of texts; creating semantic views (networks); creating theoretical notes; creating a family of documents and codes; presenting the statistical tools of the Atlas.ti programme. Moreover, the PhD students will become familiar with the main functions of the F4 programme for supporting interview transcription. During the classes, we will be coding (analysing) the materials (individual and group interview transcriptions, photographs, videos, etc.) suggested by both the lecturer and the PhD students.

12) Logics

Selected issues from formal methodology of science. Methodological types of sciences. Deductive and inductive studies. Testing hypotheses, proving statements, explaining facts. Clarification and anticipation.

13) The theories of rational choice and formal theories in social studies

The seminar is dedicated to the rational choice theory and the applications of formal theories (including the theory of social choice, the theory of games, and the formal theory of politics) in sociology and political science.
The detailed programme of the seminar – especially in its subsequent part – will be subject to modifications due to the research plans and interests of the participants. In the introductory part, the classes will concentrate on the following issues: The general assumptions behind the rational choice theory; the mutual relations of the individual motives and actions versus social

phenomena. Preferences, utilities and individual rationality – from *homo oeconomicus* to *homo sociologicus*. The problems of collective action The theory of games and its value for social studies. The rational choice theory in political science: the formal theory of politics.
In the subsequent part of the classes, the above problems will be elaborated on; the detailed selection of topics will result from the research plans and interests of the seminar participants.

14) Methods of causal effect estimation

Within the framework of estimating causal effects, the classes are aimed at making the participants familiar with the fundamentals of using the most common estimation methods of causal effects in social studies, based on quasi-experimental research, such as: difference-in-differences (DiD), *propensity score matching* (PSM), *inverse probability of treatment weighing* (IPTW), *synthetic control group* (SCG) and *regression discontinuity design* (RDD). For each of the above, a brief discussion will be dedicated to the statistical bases, which will be followed by the presentation of the methods for carrying out analyses in a statistical programme (Stata or R).

15) Advanced qualitative methods in social studies

The classes will be dedicated to the methodology of qualitative research in scientific social research. The classes will present the principles of using qualitative methods and discuss the consecutive stages of conducting qualitative research: the definition of research problems, the selection of concrete methods for research problems (e.g. individual, group and ethnographic interviews), the creation of research schemes, the selection of projection and supporting techniques, the performance of interviews and the principles of data analysis.

16) The research methods of media studies: from content analysis and discourse through surveys to biometric research

Media analysts from all over the world pay increasing attention to certain shortcomings of the classical methods from the field of social studies and the humanities. A lot is spoken about the need for their triangulation. Scholars also turn towards modern technologies, such as eye-tracking, face-tracking, EDA/GSR, EEG, NIRS etc. It turns out that what the respondent feels/experiences/perceives, what s/he reacts to, can – to a considerable extent – be measured and subject to standardisation. Thanks to new technologies, they are not limited by the so-called declaration effect either. In the research on the reception of books, press, radio, television, social media, applications and games, or in the experiments of virtual reality (VR/AR), it is possible to make an attempt to check what is actually perceived or experienced by the respondent upon contact with the stimulus. Let me present the above issues on the basis of various research performed in the Laboratory for Media Studies at the University of Warsaw.

17) Spatial analysis in social studies

The programme of the subject encompasses the use of geo-information tools, including GIS (Geographic Information Systems) programmes for qualitative and quantitative analyses used in social studies. We will present the methods and techniques for acquiring socio-spatial data as well as for preparing and presenting such data. The main part of the classes will be dedicated to the use of GIS programs for spatial analyses concerning social phenomena.

18) The legal and structural interdependency between the state and the European Union

The subject of the lecture is multidisciplinary and it concerns the phenomenon of comprehensive legal and economic interdependence of the European Union and its member states, as well as the states themselves. The changes occur continuously at a number of levels: in law, in the economy, in politics and generally in the society. The European Union is present in practically every sphere of life. This phenomenon is referred to as the Europeanisation of the state and society. The issues discussed include, amongst others, the interdependency degree of a state, the code of the European integrational processes and their

"modus operandi" with the conflict of imperatives: democracy and effectiveness, the modernist "entanglement" of law and the problem of differentiating the public and private spheres, the integration grant, the question of integrating differences and unification as the antithesis of a nation state. The lecture is based on dogmatic considerations and examples to illustrate them – amongst others: the construction of a transnational Union citizenship, the refugee crisis in Europe, the populism and rule of law in a broad (not only legal) sense; Brexit (and its consequences), the "European Union" judicature of the Polish courts, the practice of the Polish public administration.
The lecture has the form of an alternating legal analysis and political diagnosis combined with methodological guidance on the examination of these phenomena.

19) Comparative methods in social studies

The aim of the course is to discuss the key dilemmas and challenges faced by a researcher while preparing a comparative research project. In particular, there are three detailed objectives: 1) analysing the advantages and disadvantages of various approaches to the comparative method, 2) increasing the awareness of the class participants concerning the complexity of designing comparative studies through an analysis of model scientific papers, 3) training practical skills with a view to the potential application of the comparative method in the doctoral dissertation. Due to the universal nature of the problems discussed, the subject will be useful for the PhD students who locate their dissertations within all the disciplines of the broadly conceived humanities.

20) Contemporary educational measurement theories

The basic element of educational research such as *Programme for International Student Assessment* PISA, *Progress in International Reading Literacy Study* PIRLS, *Trends In International Mathematics And Science Study* TIMSS and *Survey of Adult Skills* PIAAC is the measurement of skills. In order to make full use of the results of these research projects, it is necessary to know the measurement theories they apply. During the course, the participants will be able to become familiar with the Item Response Theory measurement models. Discussion will be dedicated to the Rasch Model and the 2PL, 3PL and 4PL multi-parametric models. Moreover, methods will be presented for verifying text unidimensionality and intra-group measurement invariance, as well as for determining the reliability of text result. The course is supplemented by issues concerning standard setting, measurement accuracy and criticism of a testing measurement.

21) Evaluation methods for public policies

The aim of the course is to make the students familiar with the specificity of the evaluation methods for public policies. The discussion, in particular, will revolve around quantitative methods – but against a broader background of the theories of public programmes and miscellaneous research plans used for their evaluation, including plans based on qualitative models. The classes with be conducted in the form of a lecture with practical classes. A prerequisite for participation is good knowledge of basic regression models (OLS, MLE). To pass the classes, it is required to be familiar with the assigned books, actively participate in the class discussions, and to perform the practical tasks using the R package (the knowledge of R is not a prerequisite to participate in the classes). Framework curriculum: (1) the theories of public programmes – the programme as a specific theory, (2) the logics of intervention, (3) the types of evaluation, (4) the basic research plans and the conditions for their application, (5) the methods of influence assessment: (6) observational studies, (7) experiments and (8) quasi-experiments (including re-analyses based on the data from the worldwide literature on the subject).

22) Time series and dynamic panel data

Classes dedicated to the application of data analysis methods with temporal dimension. Topics will include:

- Time series data. ARDL. ARIMA. Conditional Variance. Cointegration.

- Vector autoregression modelling: Vector-Autoregression (VAR) and Vector Error Correction
- (VEC) models.
- Generalized Method of Moments (GMM).
- Dynamic panel data: Difference GMM and System GMM methods.
- Long T, short N panel data and cross-dependency modelling.

23) Micro data analysis

Classes dedicated to the application of data analysis methods at the level of an single individual/person/company/organisation. Topics will include:

- Heteroskedasticity and quantile regression. Endogeneity and two stage least square methods.
- Binary models. Random utility model and models for multinomial variables.
- Models for ordinal variables and count data.
- Truncation, censoring and sample selection.
- Sample selection in non-linear models. Endogeneity in non-linear models, control function approach and others.

24) Spatial data analysis

Classes dedicated to the application of statistical data analysis methods with spatial dimension. Subjects:

- Spatial statistics for areal and point data, detection of spatial patterns
- Spatial dependency models (with spatial weights matrix) – model and variable selection, estimation, testing, forecasting, missing data issues
- Spatial panel models – model and variable selection, estimation, testing, forecasting, missing data issues
- Bootstrapped regression – sampling and replications issues, interpretation of results.

PLEASE NOTE: upon simultaneous consent of the supervisor and the school manager, certain methodological and methodical classes may be passed through participation in renowned summer schools (including those conducted by international scientific organisations) or in the form of scientific internship.

Compulsory classes to be attended by the PhD students within the framework of the particular disciplines

Economics and finance

The PhD students in the discipline of "economy and finance" are obligated to choose two out of the three subjects below. The subjects are selected upon agreement between the PhD student and the supervisor, and recorded in the Individual Research Plan. According to the principles adopted, the subjects are available for all the PhD students of the UW.

1) **Advanced Microeconomics**

The aim of the lecture is to review issues and analytical methods of contemporary microeconomics. Topics will include: Consumer theory, Individual and aggregate demand, Production theory, Game theory, Competitive equilibrium, Externalities and public goods, Imperfect competition, Asymmetric information, General equilibrium, and Public choice. Students are prepared to read, understand, and contribute to, academic literature in the field. Emphasis is put on building models that explain the rationale of modern economic policies.

2) **Advanced Macroeconomics**

The main objective of the course is to introduce fundamental techniques for constructing and solving dynamic-stochastic general equilibrium (DSGE) models. The course begins with Real Business Cycle (RBC) model. The model (and its extension) will be used to illustrate the concept of equilibrium, market completeness, and solution techniques. It will also be used to show some properties of the business cycles as well as its implications for asset prices and macroeconomic policy. The second part of the course introduces the overlapping generation (OLG) model. The second major workhorse of modern macroeconomics and, if time permits, analysis of incomplete markets model in the case in which agents face idiosyncratic and uninsurable labour income risk.

3) **Advanced Finance**

The aim of this lecture is to broaden the knowledge of students in the area of finance theories and finance concepts. Basic areas covered include: (1) Elements of finance theories; Taxonomy of finance theories: traditional finance paradigm (Theories of: capital structure, asset valuation, capital budgeting and cost of equity, financial behaviour, and of international finance) and behavioural finance (limits of arbitrage and cognitive biases) (2) Analysis of nexus between financial stability/risk-taking and competition (and market structure) – theory (competition-fragility notion; competition-stability hypothesis; and non-linear links between competition and risk-taking) and empirical evidence; Efficiency and competition (and market structure) nexus; Analysis of competition (market structure) and risk-taking with the use of financial information. (3) Risk, financial stability and regulations / supervision (micro- and macro-prudential). (4) Regulations / supervision / monitoring / institutions (investor protection and governance) and their effects on risk (stability), efficiency as well as on links between competition and risk-taking ; (5) Finance and economic growth nexus: measurement of financial development, factors driving the links between finance and economic growth.

The PhD students in the discipline of "economy and finance" are also obligated to choose one subject from those numbered 22, 23 and 24 on the above list of methodological subjects.

Socio-economic geography and spatial economy

The PhD students in the discipline of "socio-economic geography and spatial economy" are obligated to pass two subjects. According to the principles adopted, the subjects are available for all the PhD students of the UW.

1) **Geovisualisation in social studies**

The classes are dedicated to make the students familiar with the methods and technical solutions related to the preparation and presentation of spatial data. The basic elements of cartographical presentation will be discussed, including: reproduction, scale, graduation, legend, content and form of a map – the rules of their application in publications and public presentations. Examples from the field of social studies will serve as the basis for discussing the rules and possibilities of using selected methods of cartographical presentation in the context of their adequacy for the issue (and the discipline) under analysis. The advantages and limitations related to the application of new geovisualisation tools (3D models, animations) will be presented.

2) Methodology and contemporary research trends in socio-economic geography

A colloquium showing the specificity and diversity of the discipline. The first part of the course will be designed to discuss the distinctiveness of "the socio-economic geography and spatial economy" as a scientific discipline, its evolution and development prospects. Next, the discussion will move on to the current research trends of the most important disciplines: the socio-economic geography: the regional geography of the world, the geography of cities, the tourism geography, the human geography, and the political geography.

Pedagogy

The PhD students in the discipline of "pedagogy" are obligated to pass two subjects. According to the principles adopted, the subjects are available for all the PhD students of the UW.

1) Child as a thinker and a social person – developmental perspective

The child as a thinker and a social person – the developmental perspective

The classes are offered in a form of a colloquium during which the discussions will be based on the recently published English language texts, concerning cognitive and social development of children. The topics will include the developmental specificity of the areas in question, the factors favouring and hindering the social and cognitive development of children, as well as the consequences of the development of these spheres for the functioning in adulthood. The PhD students will have an opportunity to master their language skills (in terms of English), discuss various research strategies and methodologies as well as the statistical methods of data analysis. They will be able to make critical references to published results, thereby improving the skills of analytical thinking.

2) The tendencies in contemporary pedagogy

The subject is aimed at increasing the knowledge on the trends and debates in the contemporary pedagogy, related to the basic paradigms of pedagogical knowledge, showing pedagogy as a science on upbringing with reference to various discourses (e.g. the philosophical vs the pedagogical discourse in upbringing), indicating the main pedagogical theories and their belonging to various pedagogical trends. The PhD students will acquire the knowledge on the basic paradigms of the pedagogical knowledge (humanistic pedagogy, empirical pedagogy, critical pedagogy) and on the classification of the pedagogical thought (currents, directions, concepts), and within the broader context in which the specific trends of the contemporary pedagogy are set, including the main social, philosophical, psychological and cultural theories that are applicable on the map of pedagogical paradigms.

Political and administrative studies

The PhD students in the discipline of “political and administrative studies” and “security studies” are obligated to pass the methodical subject indicated below. According to the principles adopted, this subject is also available for all the PhD students of the UW.

Theoretical and methodological aspects of examining political and national security institutions

The aim of the subject is to provide the PhD students with in-depth theoretical and methodological knowledge concerning the key issue of institutions, with particular emphasis on political institutions. The course participants will become familiar with different aspects of the concept “institution”. They also acquire knowledge on the types of institutionalism and their usefulness for examining various types of institutions as well as their structures and operation (*institutional design*). Moreover, the doctoral students will extend their knowledge on the dynamic approach to institutions through exploring the issue of “the theory of institutional change” and develop their skills of comparing institutions.

	KNOWLEDGE								**SKILLS**												**SOCIAL COMPETENCES**						
	WK				WG				UW			UK					UO	UU			KK			KO			KR
	1	2	3	4	1	2	3		1	2	3	1	2	3	4	5	1	1	2		1	2	3	1	2	3	1
Higher education didactics												x	x	x				x	x								
Copyrights				x		x																			x		X
Ethics						x																		x	x		X
Scholar's workshop – acquisition of grants																	x	x									
Public speaking												x				x											
Scholar's workshop – transfer of knowledge to the economic and social sphere, practical application of the results of social studies						x	x				x		x										x	x	x	x	
Methodical workshop on didactics (group)													x	x					x								
Methodical workshop on didactics (individual)													x	x					x								
Scholar's workshop in social sciences – essay composition, publishing strategies			x	x			x		x	x			x				x	x				x					
Scientific development – individual classes with the supervisor (scholar's workshop)					x	x	x		x	x							x				x	x					
Methodical, methodological classes (to be selected)			x						x																		
Interdisciplinary conference									x	x		x		x	x			x	x		x	x					
School seminar	x	x			x							x			x	x					x						
Discipline seminar	x	x			x					x					x						x						
PhD student seminar									x	x		x		x	x			x			x	x					
Specialisation classes offered by the particular disciplines	x	x	x													x											