

THE US UNIVERSITY APPROACH TO SYLLABUS DEVELOPMENT (FOR “GEOGRAPHY OF TRANSPORTATION” ACADEMIC COURSE)\*

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The article below describes the basic approach towards development of syllabus (for the academic course named “Geography of Transportation”) - the instrument that sets rules of communication between student and instructor. This tool was relatively rarely used in higher educational process in Belarus till recently, but it is gaining popularity nowadays. It is explained here, what basic information is usually included in syllabus structure. The example of universal design for learning (and project(problem)-based learning) strategy, the ones frequently used as an assessment but rarely explained within syllabus, is provided.

**Keywords:** syllabus, learning strategies, education tools, recognition (strategic and affective) networks, course policies

The word syllabus comes from the Greek word *sittyba* for a parchment label. In the English language the word *syllabus* made its debut in 1656, referring to a table or index in a book, but later, in 1889 the term had entered academic circles and was being used to describe the subjects of a series of lectures. The modern meaning of syllabus arrived around the turn of the 20th century, having expanded its purview from the subjects of a series of lectures to a program of study. As with all genres of written texts, the syllabus has developed a set of conventions in terms of content and format [7, 3]. Not much had been written on syllabus design and use in Belarus due to lack of its application in educational process at higher educational institutions (HEIs). Although positive experience of syllabi use in other post-soviet countries (such as Ukraine or Russia, etc.) had proven the effectiveness of its use as a contract, a learning tool to organize independent student’s work and a socializing tool for classroom interactions [8, 11].

The syllabus can usually be considered as contract between the University and the Student, which explains terms and conditions of the course taken, detailing all the rules necessary to get a higher grade. Like any contract, the syllabus serves to explain responsibilities of students and of the instructor for various aspects of academic involvement, such as attendance, assignments, examinations, etc. Also the syllabus might help to develop the model of professional etiquette (if it describes the policy on academic dishonesty and plagiarism or sets the rules of arriving on time to class or cell phone use in the classroom) as well as professional writing [3].

In order to fill the existing lack of information and to promote the idea of using the syllabus at the Geography Faculty of Belarusian State University, the analysis of selected syllabi on “Transportation Geography” is proposed in this material. In order to understand the common ideas on how to design syllabus on the discipline, four syllabi on “Transportation geography” and one on “GIS in Transportation Geography” taught at various US HEIs had been analyzed. The geography of syllabi examined covered the Frostburg State University (instructor - Dr. James C. Saku), the University of Wisconsin-Milwaukee (Prof. Changsman Wu), the Hunter College (Carson J. Q. Farmer), the Shippensburg University of Pennsylvania (Dr. Paul Marr) and the University of Connecticut (Natalia Vorotyntseva) [1, 2, 5, 9, 10].

Traditionally, at the beginning of each semester the necessary syllabi are shared with students: published online on the web-page of the department or posted in course management system (such as ICON - Iowa Courses Online at the University of Iowa). The analysis had shown that the content of the selected syllabi varied and depended on the instructor of the course (*during orientation workshop devoted to the process of syllabus design, organized by Fulbright Faculty Development Program, prof. D. Schwarzer (Montclair University) introduced a creative analogue of Borscht recipe with various ingredients, but the one outcome product – the syllabus*). The majority of the examined syllabi followed the common structure and format and included the following information (see table 1):

1) *General information*, such as instructor(s) name, office hours and location, and the preferred form of contact (email, skype, phone, other message tools, such as course online management system, etc.).

2) *Course information*, which delivered course title and explained whether pre-requisites (i.e. other courses, such as Economic Geography, Urban Geography or GIS that were necessary to attend the class and to participate in the class discussions) were required. Often this section was followed by course description, explaining that “Transportation Geography” course was designed to introduce students to the concepts and methods used in transportation geography. Conceptual (explaining theories of relationship between transportation and spatial structure) and methodological (with emphasis on techniques applied for transportation analysis in Geography, including but not limited to network analysis, spatial interaction analysis and gravity model) coverage of the course was proposed in some syllabi. In some course descriptions a special attention was given to practical application of the course, including abilities to create and use of transportation models, as well as to visualize and analyze spatial data in GIS software.

3) The majority of selected syllabi included course *goals*, *objectives* and *expected learning outcomes*. The course objectives usually included introduction to transportation issues at various geographic scales, introduction to methods of geographic analysis of transportation problems, examination of transportation policies in countries with different economic environments. It is usually expected, that after attending “Transportation Geography” course students would be able to demonstrate knowledge of transportation systems, infrastructures, modes, mobility patterns and to use qualitative and quantitative skills to understand any transportation issue.

4) Almost all syllabi included the list of required readings, featuring classical textbooks by J-P. Rodrigue (Geography of Transport Systems) and E. J. Taaffe (Geography of Transportation). Considering high textbooks prices in the US, that limit access to learning material, some instructors permitted previous editions of the books required, or published required readings online in course management system(s).

5) Probably, the most important part of the syllabus was *course evaluation* section, purposed to explain how to meet the required criteria in order to get the higher grade for the course taken. Usually instructors used various learning strategies to test and assess student knowledge and understanding of the course material. Group activities, class assignments, essays, mid-term examinations, quizzes, final problem solution were used both as *Universal design* for learning strategy (developing recognition (what?), strategic (how?) and affective (why?) brain networks of learning) and *Problem-based* learning strategy [4].

An analysis of illustrative material related to the course (i.e. *urbantransportation safety*) in form of essay or discussion can be used as Universal Design for learning (see fig. 1). For example, in order to exercise *recognition* networks, students can quickly list individual objects they recognize in the fig 1. To exercise *strategic* networks by examining this image for different purposes, the instructor can change the angle of perception of the picture by pointing out students’ attention on such aspects, as geographic location, pedestrians’ behavior, historic period, etc. Tuning into *affective* networks requires additional look at the picture, to see what in particular interests/strikes the student about the picture and why [4].

*Project(problem)-based learning* strategy, that can be described as an individual or group activity on particular project or problem, that goes on over period of time and results in a product, presentation, or performance, was incorporated (but barely explained) into one of the syllabi only [6].

The content of class, group or individual *assignments* in the examined syllabi varied significantly and depended on instructors’ vision of the course. They included, but were not limited to comments on readings, analysis of bibliography, data analysis, and solution of transportation problem (using *problem-based learning strategy*). In some cases the opportunity to earn extra credit for additional activities was listed in the syllabus. The final grade of the course was usually based on the total points the student received for completing all of the required components, including exams, announced and unannounced quizzes, and final project (the value of each component was defined by the instructor of the course).



Fig. 1. The example of using an illustrative material as strategy of Universal Design for learning in Geography of Transportation course

6) *Institutional and course policy* section included detailed explanation of the university and the course attendance, tasks submissions, integrity and academic dishonesty policies. Usually students were expected to attend all classes. Academic integrity is taken seriously at the US universities, all of them have the Student Code of Conduct, and academic dishonesty (cheating, plagiarism, falsification of records) is not tolerated and punished to the full extent of the existing regulations. Some syllabi listed course policies that outlined rules for professional behavior and restricted use of cell phones or laptops in the classroom. Accessibility issues are also taken seriously into consideration in the US institutions, and all the students with disabilities are encouraged to participate in classroom activities and provided with guidelines on how to get better accommodation from the University's responsible services. It is believed that those practices of developing and applying common institutional policies can serve as a good role model for many Belarusian higher educational institutions on their way towards improving reputation within international academic community.

7) The final part of the syllabus usually outlined the *course schedule*, and listed the dates of the class, topics and required readings for each class. In some syllabi the first class was dedicated to the detailed explanation of the contract to the student audience (the subject of time availability), which is a common practice at American Universities [1, 2, 5, 9, 10].

Table 1 – Evaluation of syllabi structure on “Transportation Geography” courses offered by selected US universities [1, 2, 5, 9, 10]

University	Frostburg State University	University of Wisconsin-Milwaukee	Hunter College	Shippensburg University of Pennsylvania	University of Connecticut
Syllabus check-ins	2	2	2	2	2
General Information	2	2	2	1	2
Course Description	1	1	2	NA	2
Primary and Additional Resources	2	2	1	1	2
Assessment and Grading	1	NA	NA	NA	1
Learning Strategies	2	1	2	1	2
Institutional and Course Policies	2	2	2	NA	2
Course Outline	2	2	2	NA	2

1 – Brief explanation, 2 – Detailed explanation, NA – not applicable

The analysis of the selected syllabi on “Transportation geography” academic discipline had proved the point that their content varied and depended on the instructor’s approach towards course planning and delivering the material to the audience. As the syllabi from 5 Universities across the US had been reviewed, the conclusion can be made that there is no such thing as “perfect syllabus” that fits all academic courses and instructors. The one interesting feature was typical for all selected syllabi, and it was the lack of explanation of the incorporation of learning strategies into the proposed activities and assessments, that can theoretically increase understanding and attractiveness of the course for students willing to take it.

It is obvious that syllabus can serve as an important educational tool in improving the quality of teaching and learning at higher educational institutions. It can not only explain basic rules and requirements necessary for obtaining a high grade, but also engage students to think and act creatively, critically and independently. It is not yet a common practice (although, some instructors use that tool) to incorporate syllabi in teaching process in Belarus, but the experience of creating a productive learning environment in auditorium supports the argument that the potential for it is high.

#### LITERATURE.

1. Farmer C.J. GEOG 321/721: Transportation Geography / C.J. Farmer // Hunter College. – Syllabus. – Online Document. – Access Mode: [http://www.geo.hunter.cuny.edu/courses/geog321\\_farmer/GEOG-321-721-F2013-Farmer.pdf](http://www.geo.hunter.cuny.edu/courses/geog321_farmer/GEOG-321-721-F2013-Farmer.pdf)
2. Marr P. Transportation Geography / P. Marr // Shippensburg University of Pennsylvania. – Syllabus. – Online Document. – Access Mode: <http://webspace.ship.edu/pgmarr/Geo310/Geo310syl.pdf>
3. Parkes J., Harris M.B. The purposes of a syllabus / J. Parkes, M.B. Harris // College Teaching. – 2002. – Vol. 50, No. 2. – P. 55-61.
4. Rose D. Universal Design for Learning Guidelines / D. Rose // National UDL Center. – 2016. – Online Document. – Access mode: [http://www.udlcenter.org/aboutudl/udlguidelines\\_theorypractice](http://www.udlcenter.org/aboutudl/udlguidelines_theorypractice)
5. Saku J.C. Geography 425: Geography of Transportation / J.C. Saku // Frostburg State University. – Syllabus. – Online Document. – Access Mode: <http://faculty.frostburg.edu/geog/saku/GeographyofTransportationGeog425.pdf>
6. Schwarzer T. Extending Hebrew Class Beyond the Classroom: a Problem-based Learning Approach / T. Schwarzer // Innovative Teaching Methodologies for World Language Teachers. – 2011. – P. 87-102.
7. Snyder J.A., Brief history of the syllabus with examples / J.A. Snyder // Derek Bok Center for Teaching and Learning. – Harvard University. – 2009. – Online document. – Access mode: <http://isites.harvard.edu/fs/html/icb.topic58495/syllabushistory.html>
8. Sulik G., Keys J. Many Students Really Do Not Yet Know How to Behave! The Syllabus as a Tool for Socialization / G. Sulik, J. Keys // Teaching Sociology. – 2013. – Vol. 42 (2). – P. 151-160.
9. Vorotyntseva N. GIS in Transportation Geography /N. Vorotyntseva //University of Connecticut. – Syllabus. – Online Document. – Access Mode: [http://ecampus.uconn.edu/onlinecourses/syllabi/GEOG/GEOG5130\\_Syllabus\\_Spring\\_2014.pdf](http://ecampus.uconn.edu/onlinecourses/syllabi/GEOG/GEOG5130_Syllabus_Spring_2014.pdf)
10. Wu C. Geography of Transportation / C.Wu // University of Wisconsin-Milwaukee. - Syllabus. – Online Document. – Access Mode: [https://uwm.edu/wp-content/uploads/sites/210/2014/12/geog430\\_wu.pdf](https://uwm.edu/wp-content/uploads/sites/210/2014/12/geog430_wu.pdf)
11. Шкунова А.А., Прохорова М.П. Силлабус: методическая основа организации самостоятельной работы студентов / А.А. Шкунова, М.П. Прохорова // Международный журнал прикладных и фундаментальных исследований. – 2016. – № 6 (часть 1) – С. 163-167.