Aesop Excellence In Teaching Award 2023

How we teach and talk about Single Family Homes

"Single Family Homes" and "Single Family Home – thinking ahead" as a set of courses

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figure 1: core team (© Christoph Kleinsasser)

Abstract

The two courses "Single Family Homes" and "Single Family Homes – thinking ahead" were offered in the degree programs *Spatial Planning* and *Architecture* at the TU Wien (both Bachelor and Master degree). Student interest in this very emotionally discussed topic is enormous. Facing different current challenges, such as high land consumption and climate change, the aim of the courses is to enable a critical discourse about the single-family house to prepare future planners and architects for professional practice. To cover different perspectives and the broad range of challenges within the topic, various methods were applied - such as elaborating basic knowledge (numbers/data/facts) and carrying out a personal interview with a single-family homeowner to learn more about individual motives and living preferences (course 1) or discussions following lectures on different topics and reviewing these as a group in specific settlement areas (course 2).

(Institutional) Context

The two courses "Single Family Homes" and "Single Family Homes — thinking ahead" were intended as a series and were offered in the degree programs *Spatial Planning* and *Architecture* at the TU Wien. The two courses are electives in both degree programs and carry 3 ECTS credits each. The courses are integrated in the elective modules "Spatial Planning in Rural and Alpine Areas" and "Spatial Planning Law and

Land Policy".. Considering that the study program can be completed full- or part-time, the courses are held in blocks, i.e. not weekly, and therefore easy to schedule. The target group is primarily Master's students, although Bachelor's students can also participate if places available. The usual number of participants is 25-30, about half of whom are students of spatial planning and half architecture.

The basis for both courses was a consciously critical view of the single-family house, underscored by figures, data, facts and spatial planning instruments which from a professional point of view leave little room for a positive evaluation of this housing form. Yet, we consider it extremely important to also understand the subjective motives of single-family homeowners to provide a wider perspective on the subject. In the protected space of the university, it is supposedly easy to say that this form of housing does not correspond sustainable residential to development. However, it is much more difficult to show future homeowners the issues and inform them of alternatives. The students' interest in this very emotionally discussed topic was enormous. Thus, we felt it was essential to provide a space to think jointly with them about the single-family house as a preparation for their future work in practice.

The education of future planners is seen as an essential opportunity to contribute to a change in land use approaches. After all, they are the ones who are supposed to ensure that sustainable spatial planning instruments are created and applied effectively. For the future of sustainable living, however, it is essential to remove the issue from purely academic discourse and to open up academic discourse against the background of rigid narratives.

Course content and learning objectives

The first course, "The Single-Family House," provided an initial thematic introduction. The course was organized like the structure of a house: foundation, main living space and roof. As such the first sessions represent the foundations comprising the development of basic knowledge: while the lecturers presented numbers/data/facts around the single-family house, the students chose a topic (e.g. alternative forms of housing to the SFH, ideology of the SFH, history of the SFH, construction and maintenance costs of the SFH) and researched this in further detail in small groups (3-4 students). For next

element, the main living space, each student was asked to conduct an interview with a person from their circle of acquaintances who owns or currently plans to build a singlefamily house. This was to investigate individuals' motives, reasons and future plans. The questions for the interviews were developed together with the students in a workshop. The third part was the "roof"; here the students were to analyse from their background research and the interviews. For assessment, the students were asked to compile the findings from their interviews as posters (individual work). These were presented in a faculty-wide exhibition in collaboration with the student union.



figure 2: exhibition of the results of the course "The Single-Family House" at the end of the semester

While the exhibition was the conclusion of the first course, it also marked the kick-off for the follow-up course "Single Family Home thinking ahead". For this course, a transdisciplinary perspective was adopted. Six lectures were organised covering different disciplines perspectives from (spatial planning, architecture, sociology, aesthetics, planning practice, building culture and research). The duration for the lecture and the discussion time were deliberately equal. The students took on various roles in the courses. These were divided into preparation before (literature and other research), during the course (photos, icebreaker questions for discussion) and after (documentation of the unit). During a 3-day workshop in a rural region of Austria (landuni Drosendorf, www.landuni.at), the lecture

topics were reviewed and further thought about using specific settlement areas. The documentation of the lectures as well as the workshop results were compiled in a digital reader.



figure 3: workshop in Drosendorf

Planning concept

The question of the future of spatial development is a central issue in the courses. Above all, it problematizes the tension between saving space and the single-family house as the most popular form of housing (in Austria). Future planners are to be prepared for the challenges they will face in planning practice by discussing instruments and common arguments. In the course "Single Family Home - thinking ahead" it is in particular about developing these instruments and arguments further and to potentially rethink planning, in order to sustainable convey settlement development.

Learning objectives

Upon completion of the courses, students will be able to identify what issues and challenges the detached single-family house brings to land use planning and architecture. They will also be able to provide an overview of the many aspects of the single-family home from the perspectives of regional planning, architecture, planning practice, sociology and a rural municipality. The lecturers involved have a wide variety of research interests as well as experience in planning practice which offers students a

multidisciplinary perspective and exposes them to different research and working methods facilitating the assessment of current and future trends in this subject area.



figure 4: result from course 1 (© Brandstätter)

Learning and Capacity Development

Different methods and assignments (individual and group work) are used to stimulate student learning. Tasks are distributed throughout the semester to ensure an ongoing engagement with the topic and the associated issues. Active participation is encouraged by the discursive formats. The students developed and practiced skills such as developing an exhibition, producing creative posters, presenting research findings, storytelling and conducting interviews. A special incentive is also the processing of the results for the exhibition and the digital reader, because the students' results are thus also shown outside the course and disseminated more widely. The discourse on the single-family house will also address the role of women, especially in its historical context. Likewise, the lectures will address the tension between the singlefamily house and climate change, as well as climate justice.



figure 5: cover of the digital reader

Innovation in pedagogical/topical approaches

Much space is given to (moderated) discussions. The topic of single-family homes is controversially discussed in many areas such as science, media, planning practice, climate debates, construction industry, etc. and all these aspects are addressed. In university teaching, the singlefamily house is often referred to as a no-go, but in these courses we take a closer look at why this is so, why it is nevertheless the most popular form of housing, what can be done in terms of land saving and climate change adaptation, and above all how to deal with it in planning practice. This is to be achieved through various methods such as role plays, storytelling, presentation of scientific findings to citizens during the stay in Drosendorf, discussion rounds and interdisciplinary workshops.

For example, the workshop in the course "Single Family Home – thinking ahead" began with an introductory exercise in which the students built a model of the house they grew up in and then explained its special qualities to the others.



figure 6: workshop in Drosendorf

Theory and practice integration

An essential goal of the courses is to provide the students with the tools for future employment. In order to be able to argue with citizens and planning decision-makers in planning practice and to contribute to the implementation of sustainable settlement development, instruments are further developed discussed and arguments together with the students. In addition, the students held interviews with people who live in single-family homes or are building one in order to practise conducting interviews and to learn how to argue professionally on emotional topics.

Students preparation for practice

The first course had to be partially converted to online due to the Covid19 pandemic. Digital workshops and role plays were used. A vital aspect of preparing students for practice was through simulating real-world situations in form of role plays. While such activities are normally done face-to-face, the incident of the COVID pandemic showed that workshops and indeed role play can also be conducted online. As such the delivery of the courses can be flexible. The role plays served as preparation for the interviews and in the workshops the questions for them were worked out in small groups (breakout session).



figure 7: digital role-playing game as part of the course

In the second course, the content of the lectures was variable and based on current research projects of the lecturers and further developments in planning practice. The formats were chosen to allow for flexibility in responding to new findings in research and practice, as well as the shift to online teaching. The courses were also attended by Erasmus students, who reported on the topic of single-family homes in their home countries. This was used spontaneously to create an international context and to compare the challenges in the countries (e.g. to Sweden).

Student assessment

In the first course, "The Single-Family Home", there were two elements for assessment. First, the students worked in groups to prepare a presentation on an advanced topic (part Foundation). Afterwards, they conducted interviews in individually and prepared the results graphically (photos, quotes, etc.) for the exhibition. (see figure 1, 3, 7 and 9). The written results were also included in the semester report of the research unit Land Policy and Management on the topic land conservation and land use planning.

In the second course, "Single Family Home – thinking ahead," students took different roles for the presentations (before, during, after). Before: research literature, newspaper articles, and digital media on the lecture topic. During: Prepare ice-breaker questions for discussion and document lecture and discussion (notes and photos). After: Assemble and prepare for digital reader.

Warum Traditionelle Bauweisen vergessen?



Vorhandenes Wissen anwenden und nicht ignorieren!

figure 8: result from course 2 (© Hagel)

External endorsement

Due to the high-quality student results, there was also an invitation to the "Leerstandskonferenz" in Bavaria to report on the course and the results. Furthermore, an invitation to a national radio station followed to report about the results as well.



figure 9: team at the "Leerstandskonferenz"

Student Feedback

The students rated the two courses highly and especially appreciated the extended time for discussions. The different teachers and perspectives on the topic were also rated positively. In the units that were held online, the students appreciated the use of various online tools (breakout sessions in Zoom, miro, etc.) Students noted that certain topics (e.g. control options) could be covered in more depth. Therefore, a separate lecture on this topic will be integrated in the new semester.

Lessons learned and Transferability

The discussion about the detached singlefamily house varies in intensity from country to country depending on the available permanent settlement area, land prices and availability. Overall, however, single-family detached houses are not a sustainable form of housing in terms of land consumption and climate change.

The courses could be adapted fairly easily to different national contexts and conditions. The framework concept of the two courses offers flexibility to include locally relevant materials, perspectives and content for this.

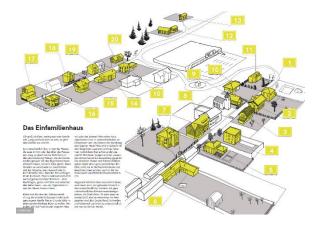


figure 10: fictitious village from all interviews (© Maria Hamann)

In the second course, we tried to pick up on the topics that were of particular interest to the students in the feedback. They were particularly interested in planning tools and how single-family homes can be managed through formal instruments. Therefore, the new edition of the course responds to this and the content of the "Spatial planning" unit has been expanded. For future iterations of the course, experts from various fields will again be brought in to give a presentation followed by a discussion. The compilation of

the lectures always refers to current challenges within the broad topic of single family homes. The core spatial planning team remains in place for continuity and covers the many topics addressed.

What made both courses thus successful are two key elements: (1) the strong focus on and enough time reserved for discussions and (2) using varied methods to really explore the topic from different angles. Both elements should be integrated when organizing a similar course.

Acknowledgment

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