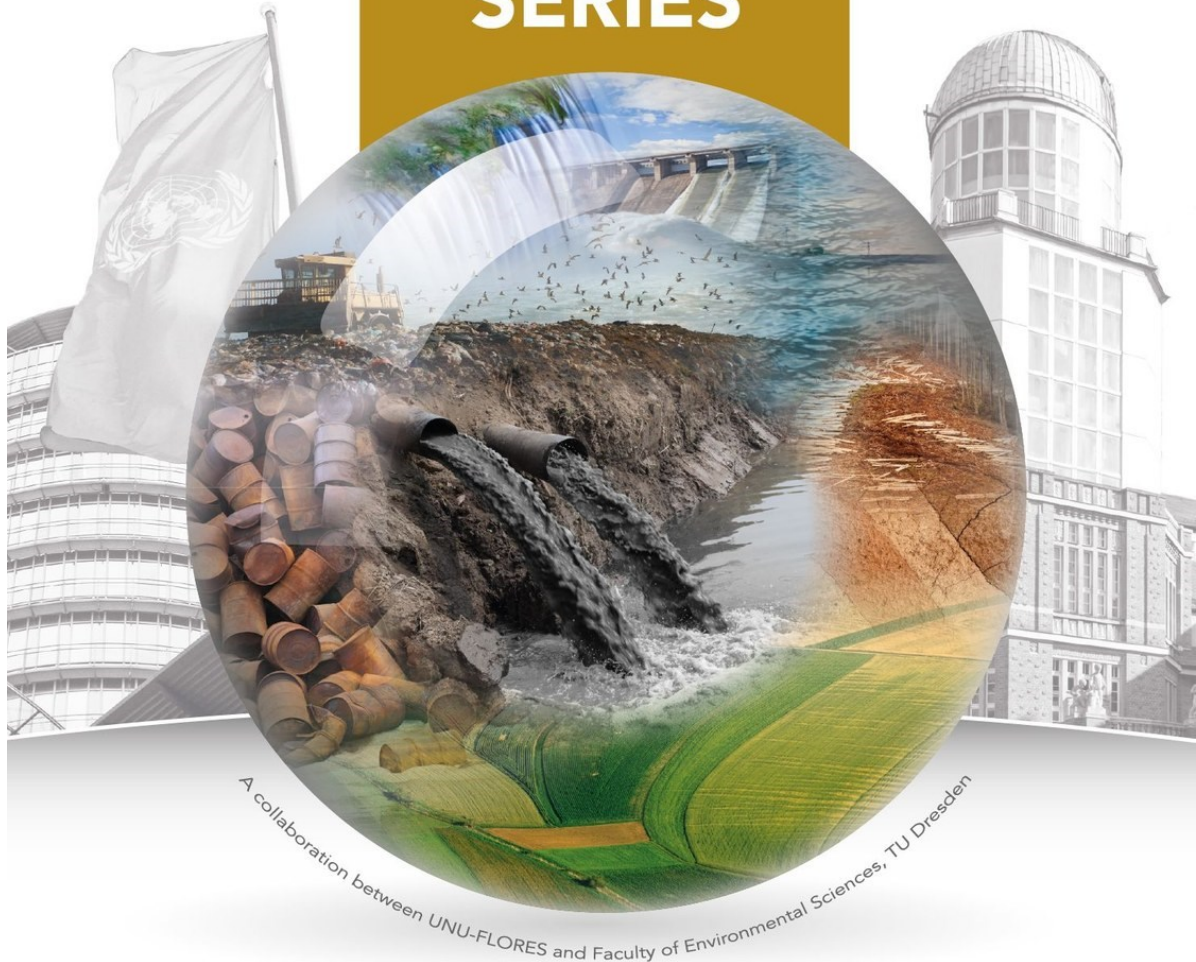


NEXUS SEMINAR SERIES



Syllabus¹ for the “Nexus Seminar” for Master Students in cooperation with the Center of International Studies (Summer Term 2019)

Place: UNU-FLORES (9th floor of the tower of the World Trade Center Ammonstraße 74, Dresden)

Contact:

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Please also consider the guidelines for scientific writing, attendance and communication ([https://tu-dresden.de/bu/wirtschaft/bu/studium/hinweise-downloads?set language=en](https://tu-dresden.de/bu/wirtschaft/bu/studium/hinweise-downloads?set_language=en))

¹ Wikipedia: A syllabus (pl. syllabi; from Latin syllabus "list", in turn from Greek σίλλυβος or σίττυβος sillybos/sittybos "parchment label, table of contents"), is an outline and summary of topics to be covered in an education or training course. It is descriptive (unlike the prescriptive or specific curriculum). Both syllabus and curriculum are often fused, and usually given to each student during the first class session so that the objectives and the means of obtaining them are clear. A syllabus usually contains specific information about the course, such as information on how, where and when to contact the lecturer and teaching assistants; an outline of what will be covered in the course; a schedule of test dates and the due dates for assignments; the grading policy for the course; specific classroom rules; etc.

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1. Course Description, Aim and Content

The joint seminar series of Technische Universität Dresden (TUD) and United Nations Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES) features lectures by senior scholars that highlight all dimensions of research on the Nexus Approach, ranging from hands-on implementation strategies to theoretical debates. The Nexus Seminars serve not only as a platform for scientific exchange and cooperation between UNU-FLORES and TU Dresden but also as a medium for the partner institutions to discuss their research with a broader audience.

According to UNU-FLORES the Nexus Approach to environmental resources' management examines the interrelatedness and interdependencies of environmental resources and their transitions and fluxes across spatial scales and between compartments. Instead of just looking at individual components, the functioning, productivity, and management of a complex system is taken into consideration (for further information see <https://flores.unu.edu/en/research/nexus>). Understanding these interlinkages helps to better comprehend the concept of sustainability and how to deal with its related challenges, like climate change, policy adaptation and governance as well as interdependences between different sectors, disciplines and the dimensions of sustainability. By attending the lecture series students gain insights into the Nexus Approach from different disciplines and how these disciplines contribute to achieving the United Nations' Sustainable Development Goals.

2. Organization of the Course

The organization of the course is structured as follows. The attendance of the four Nexus Seminar plenary lectures will be noted and students need to sign the registration list at the entrance of the Nexus Seminar premises.

3.1 Basic Knowledge

Plenary lectures constitute the traditional way of transmitting knowledge. However, as we are convinced that more interactive and self-employed kinds of learning are more promising we will minimize the classical knowledge transfer through lectures. In four plenary sessions the researchers will present their research and reflect on it under consideration of the Nexus Approach. **A written exam of 60 minutes** at the end of the term will test their knowledge on the topics discussed in these lectures. For this, each lecturer will contribute questions to the exam.

3.2 Application of Knowledge

The knowledge transmitted via plenary lectures and acquired through self-study forms the basis for critical discussions during the sessions. Each lecture is followed by a discussion time. Aiming at enabling students to apply theoretical knowledge, the students will have to prepare a **written report in groups of three** based on the topic provided. The student groups will draft a written report following the structure of the following milestones:

3.2.1 The aim of the report

The report aims at strategies for new corporative governance in a Circular Economy in a Sustainable Society. The topic of the report relates to the Dresden Nexus Conference 2020 under the theme "Circular Economy in a Sustainable Society". See the Concept Note for details: https://i.unu.edu/media/flores.unu.edu-en/event/6925/DNC2020_Concept-Note_Final.pdf.

The students will conduct a content analysis based on a systematic review guided by the above described milestones. In order to cover all the aspects mentioned above, the team will prepare: A written report with a maximum of 50,000 characters (incl. spaces, without cover sheet, without lists (of tables, etc.), without appendices). If the report is longer than those 50,000 characters, we are willing to only read the first 50,000 characters.

3.2.2 Milestones

1st milestone: research question

Students develop a research question related to the topic new corporative governance in a Circular Economy in a Sustainable Society, which is supposed to guide the written report. Students should deduce the research question from available academic literature, describe the aim, the motivation for the paper, and the students should try to point out a research gap by discussing scholarly literature. This milestone contributes to the introduction and theory section of the written report.

2nd milestone: methodology and application of a systematic literature review

Guided by the provided methodological literature students are expected to conduct a systematic literature review on the subject of the report. For this purpose, scientific databases (e.g., Academic Search Complete, Business Source Complete, E-Journal Wiley Online Library, SpringerLink, Web of Science) and scientific search engines (such as Google Scholar) should be used. Students have to provide reasons for the choice of databases and scientific search engines.

Students should define suitable search terms, search term combinations and synonyms, use truncations and linking functions and provide a summary of the search hits (search term combination, database, found hits, search limitations in case of a high number of hits, appropriate hits – see draft given in the guidelines for scientific work (https://tu-dresden.de/bu/wirtschaft/bu/studium/hinweise-downloads?set_language=en)).

Students have to list the inclusion and exclusion criteria they have used when selecting relevant literature sources and provide reasons for the choice of criteria. In addition to that, students should attach the used literature within a reference list in the appendix of the report based on the quoting style presented in the guidelines for scientific work. This milestone contributes to the methodology section of the written report.

3th milestone: methodology and application of the content analysis

On the basis of methodological literature, students should work out the objective and the proceeding of a content analysis and describe the single steps of a content analysis. Students should furthermore provide a reasoned justification why the content analysis is appropriate for the written report. Participants describe the content analysis planned for the written report, present the single steps of the content analysis, deduce the categories of the analysis grid with reference to the specialized literature researched, and draw up a code tree. Students should use a content analysis software, like MAXQDA (which is available in SCH B247, SCH B 250, SCH A200b). For the research synthesis in form of a content analysis students should also define qualitative and quantitative approaches. At the end of the milestone, students attach the used literature in form of a reference list based on the quoting style presented in the guidelines for scientific work. This milestone contributes to the methodology and results section of the written report.

4th milestone: research synthesis and drafting the written report

Students draft the written report based on the results of all milestones and the research synthesis to respond to the research question. Thereby it follows the typical structure (introduction, theory, methodology, results, discussion, conclusion with implications). The theory section motivates the research questions and informs about the theoretical background. The methodology section reports and justifies the methodology based on the second and third milestone. The results are reported in the result section and discussed within scientific literature in the discussion section. The conclusion summarizes the findings and points out implications for future research, policy and practice.

Methodological Literature

FINK, A. 2009: Conducting research literature reviews: from the Internet to paper, SAGE Publications Inc., Thousand Oaks.

KRIPPENDORF, K. 2004. Content Analysis: An Introduction to its Methodology, Thousand Oaks: Sage

STECHEMESSER, K., & GUENTHER, E. 2012. Carbon accounting: a systematic literature review. Journal of Cleaner Production, 17-38.

3.2.2 Submission of the written report

The written assignment should be submitted via e-mail to anne-karen.hueske@tu-dresden.de and caucci@flores.edu. The assignment should be submitted as printed version and as word file. Note: Students have to submit the documents to the secretary office of the Chair of Business Management, esp. Sustainability Management and Environmental Accounting at TU Dresden (SCH B246, Münchner Platz 1/3) during office hours and by **until 2019-08-12**.

The title of the file is given by the issue of the written report and should be denoted in the following way: [Group number Keyword family name of students],

e.g. Working Group 4 about Honda1 writes: G4_Honda1_Mueller_Mayer_Blume.docx

Only documents which have been received within the deadline and which will contain surnames, forenames, and student numbers will be graded.

As for the students future professional practice, you must learn how to organize and coordinate yourselves and work in a team to achieve the best performance for your team. All team members must participate equally in the preparation of the written report. The course thus follows the principles for ensuring good scientific practice of the German Research Foundation, which states that authors "shall be all those, and only those, who have made significant contributions to the conception of studies or experiments, to the generation, analysis and interpretation of the data, and to preparing the manuscript, and who have consented to its publication, thereby assuming responsibility for it." (http://www.dfg.de/download/pdf/dfg_im_profil/reden_stellungnahmen/download/empfehlung_wiss_praxis_1310.pdf) To avoid any unbalance on team members contribution to the written assignment, please tell us well in advance if there are any deviations from these principles within your group. We reserve the right to take it into account in the final evaluation.

3. Grading

Important note: You have to **register for this course on Hisqis at the latest one day after the second lecture**. After handing out the topics, students have **14 days to withdraw from the course**. If they do not withdraw during this period, they will fail.

The grading consists of two elements:

1. The most important topics of the lectures will be part of the **written exam**.
2. Students will prepare a **written report** in teamwork of three students.

Both parts are weighted equally.

We hope that you enjoy this seminar and benefit from your efforts. We are looking forward to work with you.

4. Time Table

The following table represents the schedule for the course.

Session	Time	Topic
1	08.04.2019 15:00-16:30	Introduction to the Nexus Seminar Series for ZIS students (Dr. Serena Caucci, Dr. Anne-Karen Hueske)
2	15.04.2019 15:00-16:30	Development and Challenges in the Energy Industry (Prof. Dr. Dominik Moest, Head of the Chair of Business Management, esp. Energy Economics, member of PRISMA – Centre for Sustainability Assessment and Policy at TU Dresden)
3	29.04.2019 15:00-16:30 tbc	Consultation for the group project to discuss research questions (Dr. Serena Caucci, Dr. Anne-Karen Hueske)
4	20.05.2019 11:30-13:00	One Swallow Does Not Make a Summer: Siloes, Tradeoffs and Synergies in the Water- Energy-Food Nexus (Dr. Mathew Kurian Academic officer for Capacity Development and Governance at UNU-FLORES)
5	03.06.2019 15:00-16:30 tbc	Consultation for the group project to discuss outline (Dr. Serena Caucci, Dr. Anne-Karen Hueske)
6	17.06.2019 15:00-16:30	Integrated Modelling and Management of Water Resources: the Ecosystem Perspective on the Nexus Approach (Dr. Stephan Huelsmann Academic officer for System and Flux Analysis Considering Global Change Assessment at UNU-FLORES)
7	22.07.2019 15:00-16:30	Identifying the Challenges of Water Sustainability in Environmental and Social Management (Dr. Jonathan Morris Post Doc at the Chair of Business Management, esp. Sustainability Management and Environmental Accounting at TU Dresden)
	12.08.2018 tbc	Submission of final report
	Tbc	Final exam