Rules
This set of rules defined by the coordination team of the PhD school describes the principles of cooperation within the PhD school “Environmental systems sciences”, established at the URBI faculty of the University of Graz. It is based on and provides the operational guidance to the curricula on interdisciplinary PhD and natural science PhD (Mitteilungsblatt der Karl-Franzens-Universität Graz, special issues 129 and 130, respectively, both dated June 30, 2011).

Requirements for the degree of a PhD at the PhD school
There are three requirements to be fulfilled for students enrolled in the PhD school to become eligible for the degree of a PhD:

*) successfully passing a set of courses (32 ECTS) over the course of three years
*) compiling a PhD thesis
*) passing the “Rigorosum” exam

Coursework needed:
Courses need to be taken in three subjects: a compulsory subject, an elective subject, and a methodological subject (for the interdisciplinary doctorate only; natural sciences students may choose from further compulsory or elective subjects to match ECTS points).

Courses on the compulsory subject (16 ECTS) are directly related to the PhD thesis and are offered by the respective institute to which a student is affiliated. These courses are:

- A “colloquium” (DQ) to discuss the student’s work in a thesis (to be passed twice, 4 ECTS each)
- A “seminar” (SE) to strive for scientific discussion on the topic of research in general (4 ECTS)
- A “privatissimum” (PV) to directly exchange with the advisor (4 ECTS)

The elective subject (total 8 ECTS, equaling 2 seminar courses or similar) may be chosen by the student, to be confirmed by the dean of studies. Courses chosen should belong to just one subject (need to allow for an oral exam, see “Rigorosum” below) related to the topic of the thesis while being different to the compulsory subject. In case the student wishes to earn the credits during a summer school, pre-authorization of the course being appropriate is strongly recommended.

The methodological subject (as required for the “interdisciplinary studies” only, but potentially to be chosen by “natural science” students also; 8 ECTS) refers to courses on methodologies potentially to be used, including philosophical, statistical or systems theoretical content. The dean of studies decides upon acceptability of a course.
Students of “natural science” doctorates need to extend both compulsory and elective subjects, until they arrive at a total of 32 ECTS also. Doing so will allow then to opt for a methodological subject also.

**PhD thesis:**

The doctorate school opts for the “cumulative” way of a thesis, consisting of individual and at least in part published papers rather than a classical book publication. Only in exceptional cases, a monograph will be accepted by the coordination team of the doctoral school as a thesis.

The cumulative thesis will consist of at least three published papers, an introduction outlining the research question(s) and a synthesis to explain the topical coherence of the three papers and the level of contribution of the student (in case of multi-authored papers). One of the papers needs to be first-authored by the student and at the time of submission accepted for publication in an ISI-listed journal. A second paper needs to be co-authored with substantial contributions (typically, second or third author at least) and accepted under the condition of “minor revisions” in an ISI-listed journal. The third paper, again with substantial contributions of the student, needs to be at least accepted as a journal article (not necessarily ISI-listed) or published as a book contribution or as a full conference proceeding (equivalent to a journal publication) by the time of submission of the thesis.

Evaluation of the thesis will be performed by three reviewers from at least two different institutes, typically one of which from outside the university. The advisor can be one of these three reviewers. In the case of an “interdisciplinary” doctorate, the advisor or another person will be a third reviewer. The advisor can only evaluate contributions where he/she is not also co-author (at least the introduction and synthesis sections of the thesis) and will act only in a minor role in the overall grading.

**Rigorosum**

The rigorosum is the final exam of the PhD programme, a public exam accessible only after successfully passing all courses and positive evaluation of the PhD thesis. The exam commission consists of at least three persons in possession of the venia docendi in the relevant subjects, one of which examines the compulsory, one the elective subject, and a third one acting as a chair. The student may suggest names of persons to act as examiners. Typically, the advisor will examine the compulsory subject. In choosing the courses of the elective subject (see “coursework”, above), consideration of an appropriate examiner is a good idea.

The rigorosum consists of a PhD defense (typically half hour presentation and half hour discussion) and an oral exam on each of the two subjects. Overall, the rigorosum will not last longer than 90 minutes.