ENVIRONMENTAL SCIENCE DEPARTMENT
ORAL EXAMINATION PROCEDURES
2008 - 2009

The oral examination is the capstone of the Masters program and must be taken by all students during the final full semester after the student has met the requirements of their specific degree. Oral exams must be taken during the academic year (September through May). In addition, the oral exam should be completed by week 9 of the semester (to allow for re-examination, if necessary). Oral exams test the student's knowledge of general environmental issues and global concerns. Topics in which we expect the student to be conversant include:

- Environmental stewardship, ethics, history, and scientific uncertainty
- Human population growth
- Environmental impacts of energy
- Air pollution
- Stratospheric ozone
- Global warming / climate change
- Deforestation
- Biodiversity
- Soil degradation
- Water crisis
- Ecological footprint / carrying capacity / food production

Oral Exam Committee
The exam is administered by a minimum of three and maximum of four full or adjunct professors from the student's advisory committee. Your advisory committee must consist of the ENSC Department Chair, the ENSC Graduate Advisor and up to two additional professors of your choice.

It is your responsibility to set a date and time for your oral exams that is agreeable to the entire committee. Further, it is your responsibility to reserve an appropriate classroom for the oral examination through the departmental administrative assistant.

You must provide a reminder to the entire committee one week prior to the examination that includes your name, your degree, and the date/time/location (classroom) of the exam.

Oral Exam Procedures
The examination lasts approximately 1-3 hours and covers current environmental issues, as well as the material covered in your coursework. While you are not expected to cover your coursework in detail, you should be able to discuss your coursework materials in a broad context.

You will be expected to provide a full listing of the coursework, with instructors, you have completed for your degree at the time of the exam.

Grading of Oral Exams
The oral exam is Pass/Fail and requires a simple majority vote from the committee. If a student does not pass the exam, one re-examination is permitted. If the failure resulted primarily from weakness in a narrow area, the second examination may be designated to cover only that area of weakness. The examining committee will notify the student in writing of the scope of the next examination.
The examination may not be repeated more than once. A student who does not pass on the second attempt is thereby subject to disqualification from further work as a graduate student in this program. The results of all Masters oral examinations must be reported to Associate Dean of Graduate Studies. The deadlines are available on the College website at http://www.cse.tcu.edu/ThesisDissertation.html. Note that even if you are not a thesis candidate (i.e., MA or MEM), you still have to sit the oral exam and have the results sent to the Associate Dean by this date.

**Oral Exam Preparation**

Oral exams require a different set of skills than those for a written exam. You will need mastery of the material, but you will be required to articulate your knowledge. Some previous experience in teaching, debating, oral presentations, tutoring, class participation, recitals, science fairs, etc. is helpful. The following steps will help you with preparation:

- Read and understand the department’s rules for the exam. If you have procedural questions, ask them well before the exam.
- Choose your examiners carefully. Choose people with whom you are comfortable and that have an established relationship with each other.
- Set up a study plan – when you will study, and in what order you will work through the material.
- Read and understand each item on the reading list, but also understand the relations among the items. Was x influenced by y? What does x think about the work of y? What common tools do x and y use? What is the contribution of x?
- Be prepared to “lecture” on the material – present the ideas clearly, give examples, work examples provided to you, prove theorems, compare different approaches, say what’s ‘new’ about results in a given paper, discuss the strengths and weaknesses of an approach.
- Practice in front of a board. Even better, practice with other students who are taking the exam at roughly the same time. Get more advanced students to ask you questions. Check that your voice is loud enough. Aim for a logical presentation of ideas. Make sure that your English is understandable, even if it is not your native language.
- The exam is often easier if it begins with a presentation by you – e.g., what coursework you have completed and what you intend to pursue (career vs PhD).
- **Listen carefully to questions and make sure you understand exactly what is being asked.** Pause for a moment after the question to compose your thoughts and organize your answer.
- Follow instructions exactly – if a short answer is requested, keep it short. If more detail is desired, give a longer response.
- Don't interrupt a questioner.
- Good examiners will ask you questions on a given topic until they tire of it or until you answer incorrectly. It is all right to be wrong – the purpose of the exam is to discover the limits of your knowledge. Students pass even if they don't know everything asked!
- If you do not understand the question, ask the questioner to rephrase it, or give your interpretation and ask if that is what is meant. If you are sure you cannot answer the question, it is best to admit that and go on, rather than wasting time and focusing the examiner’s attention on what you don’t know rather than what you do.
- If you are confident about a question, answer as directly as you can, but feel free to make comments about the relevance of this result to your work, etc.
- Remember that each new question is a fresh start. Let the old one go. Don't get flustered – remember that the examiners expect you to be unable to answer some questions – that’s how they explore the limits of your knowledge.
- If you do find yourself losing your composure, ask the examiners for a brief break to get a drink of water or to sit down for a minute. You may be reluctant to delay them this way, but it saves time in the long run to get an accurate assessment of your abilities the first time.