

# THE ECOLOGY AND CONSERVATION OF GABON

## **Course Outline and Description**

*The Ecology and Conservation of Gabon* is a 1 to 2-credit field course to study the environmental problems, challenges, and aspirations of a developing nation in Africa. Students will spend two weeks in Gabon, May 11 to 25, 2015, exploring both natural (relatively pristine) and human-disturbed tropical ecosystems. The goal of the course is to expose students to the country's natural ecosystems and its development challenges and to inspire them to think critically about development trade-offs. Students will visit the beaches, mangroves and towering Okoumé forests on Gabon's Atlantic coast and then trek into the interior tropical forests. Along the way, they will study the drivers of environmental degradation and destruction: subsistence agriculture, large-scale logging, industrial agriculture (e.g. palm oil production), mining and hunting/poaching. Students will participate in field research and evaluation of environmental policy options, with field investigations examining the role of human and industrial impacts on the environment. Course topics will include:

- Culture, environment, and politics of Gabon;
- Field study of flora, fauna, biotic communities and human interactions, and ecological processes;
- Field evaluation of management options for biodiversity conservation and wildlife management;
- Analysis of certifications schemes (e.g. FSC and RSPO) as a means of merging conservation and development objectives;
- Problems of sampling, quantification, and site-specific environmental impact assessment in wildland planning and wildlife management;
- The role of field research in wildland/wildlife management;
- Special topics such as the bushmeat crisis, elephant poaching, reducing impact of deforestation and degradation, etc.
- Strategies for low emissions development options for developing countries and the role of land-use planning.

## **Skills/Tools Gained**

Students will learn to think critically about the trade-offs between environmental conservation and economic development in the context of a tropical, developing country. They will gain skills in evaluating human impacts on the environment, designing experiments and studies, and collecting data in the tropical environments.

### **Prerequisite Requirement**

The course will be limited to 12 participants. Prerequisite for admission is one graduate level course in Tropical Ecology or Conservation Biology/Management. Priority will be given to students with French language skills.

### **Learning Experiences and Academic Overview**

The field course involves 14 days of instruction and field research. Faculty and staff work directly with student's 6-10 hours a day, and are available for tutorials before and after scheduled activities. Seminars and discussions with local experts are held daily, usually in the evening when they will not conflict with field activities. Field manuals and readings will include literature selections from recognized environmental academic writers, published scientific papers and reports, and environmental impact assessments/planning documents for the specific areas of focus. Resource speakers representing the principle wildland/wildlife management agencies, researchers from universities, national and regional conservation organizations, managers from industry, and citizen groups join the seminars on a regular and frequent basis.

### **Evaluation and Assessment**

Two different tracks for the course will be offered. On the 2-credit track, students will earn 1 credit by attending monthly seminars during the Spring semester, and a 2<sup>nd</sup> credit in the Fall semester by participating in the summer field course and a debriefing seminar early in the Fall semester.

On the 1-credit track, which is made available for second year MEM students, the students will earn 1-credit after the Spring semester of monthly seminars. This will allow grades to be delivered before graduation. The expectation is that the students will then participate on the field trip, for which a place will be held for them.

During the Spring semester, students will be required to attend monthly 2-hour class meetings. These seminars will consist of readings and discussions related to the class topic. Students will be assessed based on their active discussion of course readings, presentations, and critical thinking skills.

During the field trip, students will be assessed on their engagement in course activities, the quality of their interactions with lecturers and experts, and maintenance of a field journal. To conclude the field trip, students will attend a debriefing meeting early in the Fall semester.

The course will be graded.