I. **Instructors of Record**

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Auburn University  

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Education Director  
International Student Volunteers (ISV)

II. **Course Title:** International Issues in Natural Resource Management

III. **Pre-requisite/co-requisite**  
None

IV. **Course Format/credit hours**

3 credit hours will be given for successful completion of FOWS 3015. The class will include six 2-hour discussions/lectures on site and ten 8-hour days of service/educational contact with conservation and management organizations. All discussions/lectures and service/educational contact will occur in the host country.

V. **Host Countries:** Australia; New Zealand; Costa Rica; USA/Canada, Thailand, Ecuador, Eastern Europe, South Africa.

VI. **Course Description**

Awareness of the importance of sustainable management of natural resources has increased significantly in the last several decades as a result of scientific research, media attention, and greater accountability and transparency of exploitative practices at global and regional scales. Local communities, governments, and international organizations have come to recognize that the Earth’s natural resources are not inexhaustible and need to be protected and conserved in a proactive manner to ensure fundamental ecosystem functioning, as well as their persistence for generations to come. In support of these objectives, this two-week course examines contemporary natural and cultural resource management practices and conservation programs through national and international program placements. Students assist local organizations in attaining their specific conservation goals within ethnic heritage sites, protected areas, or managed lands during the two-week period. This course provides students with the opportunity to: 1) gain hands-on experience working in support of conservation and sustainable management of natural resources; and 2) explore and learn about the host country, its people, cultures, and ecosystems. Through lectures, participatory discussions, exploration, and direct involvement in local conservation and natural resource management projects, this program
introduces students to issues including sustainable community development, conservation of biological diversity and ecosystems, habitat restoration, threatened and endangered species recovery, and species inventories.

VII. **Course Objectives**

Through exposure to and direct participation in conservation and management programs, students will gain insight into issues of sustainability and ecosystem conservation that are specific to the host country, yet globally significant. They will learn criteria for identifying and assessing the condition of threatened terrestrial and marine environments, while learning about the challenges faced by human communities who rely on these resources. They will also learn about the local cultural and/or institutional natural resource management regimes.

Students will learn a variety of applied/technical skills through surveys and assessments of ecological and social systems. Specific tasks undertaken during the programs will vary with individual volunteer work projects and host country and may include any or all of the following:

- Endangered species habitat monitoring and inventories;
- Establishing baseline data to promote the sustainable management of cultural and natural resources;
- Defining the principals of ecosystem identification, management, and restoration (including removal of invasive species);
- Identifying cultural and institutional natural resource management regimes;
- Preserving ethnic heritage and historic sites;
- Designing interpretative facility resources;
- Preparation of sites for ecotourism consistent with conservation of natural systems.

VIII. **Course content**

Discussions and lectures will be led by the ISV instructor, student participants, local NGO partners, local government agency representatives and other professionals and academics relevant to the project. Discussion/lecture topics include but are not limited to:

- Local social, cultural and ecological context of natural resource use
- Community livelihoods
  - Social, physical, capital, human and natural assets
- Local flora and fauna and conservation issues
- Historical and current natural resource management regimes
  - Government and local community management structures
- Adaptive management, sustainable management, and co-management
- Conservation programs and implementation
- Evaluating and monitoring social, cultural and ecological resilience
- Ecotourism and interpretation of natural resources

IX. **Texts or Major Resources:**

Five selected articles will be distributed to the students on natural resource management and community management. Two additional country specific case studies will also be provided to the students for their review and serve as the subject matter to discuss international issues in natural resource management.
Example readings include:


X. Course Requirements/Evaluation

Students are expected to actively participate in all volunteer work activities undertaken by their host organization during the volunteer work component of the program. Students will be evaluated based on satisfactory completion of all of the following criteria:

a. Daily journal entries in a field notebook describing the student’s activities, observations of environmental conditions and environmental management practices, and contacts with local resource persons (25% of grade).

b. Participation in all regular group discussion/lecture classes during the two-week project, and leadership of one group discussion as directed by the ISV Instructor (25% of grade). Participation involves actively participating in discussions by providing input and asking and answering questions in discussion class and during volunteer field activities.

c. Documentation and evaluation by the ISV on-site Instructor of project results and student performance during the natural resource conservation work project (10% of grade).

d. A quality term paper describing the student’s specific project and overall cultural and environmental lessons that also draws relevant information from assigned readings and additional published sources (40% of grade).

Assignments:  

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<tr>
<th>Item</th>
<th>% of grade</th>
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<tbody>
<tr>
<td>Daily Journal</td>
<td>25%</td>
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<tr>
<td>Group discussion/lectures</td>
<td>25%</td>
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<tr>
<td>On-Site student performance</td>
<td>10%</td>
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<tr>
<td>Term paper</td>
<td>40%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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The standard grading scale will be used (i.e., 90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; <60% = F).
Please note: On-site grading and evaluation within the host country is the responsibility of the ISV Instructor. Collection of grades from ISV instructors is directed by the ISV Academic Credit Coordinator. Grading of final papers and the overall assignment of student grades is given by the instructor of record at Auburn University.

XI. Course Policies

Participation: Students are expected to attend all discussions/lectures and actively participate in all project activities and tasks. Attendance is mandatory.

Excused Absences: Students are granted excused absences from class for the following reasons: illness of the student or serious illness of a member of the student’s immediate family, the death of a member of the student’s immediate family, and religious holidays. Students who wish to have an excused absence from this class for any other reason must contact the instructor in advance of the absence to request permission. The instructor will weigh the merits of the request and render a decision.
   a. When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required. Please see the Tiger Cub for more information on excused absences.

Make-Up Policy: Arrangement to make up missed assignments (e.g. daily log, discussion/lecture, term paper) due to properly authorized excused absences must be initiated by the student within one week from the end of the period of the excused absences. Except in unusual circumstances, such as continued absence of the student or the advent of University holidays, the make-up work will be due within two weeks from the time that the student initiates arrangement for it. The format and content of the make-up work will be at the discretion of the instructor.

XII. Academic Honesty

Students should become familiar with the Student Academic Honesty Code that is published in the latest version of the Tiger Cub: http://www.auburn.edu/academic/provost/ahc.html. Students in this course are expected to strictly adhere to this code. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost at Auburn University, which will then refer the case to the Academic Honesty Committee.

XIII. Students with Disabilities

Students who need special accommodations in class, as provided for by the American Disabilities Act, should arrange a confidential meeting with the instructor during office hours the first week of classes - or as soon as possible if accommodations are needed immediately. You must bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have these forms but need accommodations, make an appointment with the Program for Students with Disabilities, 1244 Haley Center, 844-2096 (V/TT) or e-mail: scw0005@auburn.edu.
XIV. Student Requirements for Academic Credit

1. Write a daily field journal (25% of grade)

Description: During the volunteer work project, field journals should outline and detail the daily activities (daily tasks, encounters, experiences, and conservation lessons learned), the issues that are presented (environmental and cultural controversies), the practical problems faced by local resource managers and how they are being addressed, and personal reflections on the program’s goals, challenges and opportunities. Students will be expected to document in-depth conservation information about their projects. Students should also include notes on the cultural aspects of the host country (i.e. local communities) and their apparent influence on local conservation practices.

Throughout the two-week project, students are encouraged to record the group discussion topics and their personal reflections on each topic. ISV Instructors will provide further guidance and ideas for journal writing. Students are expected to write at least three pages of quality journal entries daily. Field journals will be submitted to the ISV Instructor for grading twice during the project (once each week). This is an academic journal and not a personal diary; any personal reflections or entries that are not related to the academic nature of this journal should be kept in a separate private notebook.

Examples of topics for field journal entries during the project are:

- The social and environmental context in which the host organization operates
- Specific threats to local flora and fauna, habitats, and ecosystems
- Background and conservation goals of volunteer work project
- Challenges and successes of the host organization
- Daily project activities and tasks and why they are necessary or important (how are they beneficial to organism/habitat/ecosystem/community?)
- Description and characteristics of habitats, local flora and fauna encountered
- Life history of organisms under study (where applicable)
- Experiences/interactions with local community members
- Involvement (or lack thereof) of local community members in project maintenance
- Perceived social and economic benefits and environmental costs of tourism activities (if applicable)
- Summaries and further reflections on Group Discussion topics.

2. Group discussions/lectures (25% of grade)

Description: There will be a minimum of six group discussions during the two-week project. Group discussions are scheduled and facilitated by the ISV Instructor(s) and usually last two hours. Discussions are intended to encourage sharing of information and ideas, perspectives, and opinions among students and their ISV Instructor. It is an open forum for learning that will assist students in accomplishing their personal and academic objectives during the two-week project.

Discussion topics will cover a broad range of issues relevant to the specific project, host country, activity/location, current events, and conservation at local, regional and international scales. Students are required to lead one discussion and to attend and actively participate in all other group
discussions. Failure to attend will result in a zero mark for that particular discussion and a significant reduction in the overall grade for this portion of the course.

Prior to departing for their ISV program, academic credit students must research and prepare a topic for leading a group discussion during their volunteer work project. Students can choose their own discussion topic but should provide their ISV Instructor (or the ISV office) with a general outline of the chosen topic no less than one week before departure for the host country. Discussion topics on issues of conservation and/or sustainable resource management that are not directly related to the specific project are permissible, though topics should be broad enough in scope so that each member of the group can contribute to the discussion. Discussion topic can come from the assigned readings. This task will be coordinated by the ISV Instructor. Students are not expected to be “experts” in their project or discussion topic, they are only asked to think intuitively, critically, and creatively about the problems at hand and the potential solutions; and then to communicate these ideas and concepts to their peers. ISV Instructors will provide input and guidance to students in shaping their discussion.

3. Evaluation for Conservation volunteer work project (10% of grade)
Description: An evaluation form will be completed on each student by the ISV Instructor at the completion of the conservation volunteer work project. Students will be assessed based on their participation, critical thinking, advance preparation, attitude and cooperation during the two-week project.

4. Write a term paper (40% of grade)
Description: The term paper assesses the environmental problems in the region/community visited, the goals of the host organization, and considers the contribution of the work performed by student volunteers towards those goals. The paper must be written in three sections that describe several environmental and/or cultural aspects of the student’s two-week experience (see outline below). It should place the student’s own experiences and observations during the program within the context of local natural resource management and should also draw upon the intellectual resources of the program leaders. Independent research from the primary literature (i.e., academic, peer-reviewed journal articles) is required to provide background and support where necessary. In addition to the assigned readings, a minimum of six references from acceptable sources (see list below in Tips for Writing a Successful Term Paper) must be cited appropriately and listed in a bibliography. Other sources may also be included as additional references.

The paper is due no later than 28 days from the conclusion of the ISV four-week program (which is six weeks from the end of the volunteer project, regardless of when student returns home), and deadline extensions will not be granted. Failure to submit your paper will result in an ‘F’ on your transcript.

The paper should be approximately ten double-spaced pages in length. Section A should make up approximately 40% of the paper, Section B, approximately 50%, and Section C, the remaining 10%. The paper should contain appropriate citations, a brief introduction and conclusion, and a bibliography of supporting references. Please note that failure to cite the minimum required references and list references in a bibliography will result in a substantial loss of marks on the term paper.

Please note that papers will be assessed by the same standards as employed in any university course. Evidence of plagiarism will result in a zero grade for the paper and possible failure of the
course. This may also be reported to the accrediting university.

Section A: Problem definition (40% of the paper)
A. Describe the ecosystem or natural resource that is under threat.
B. Describe the recent, traditional, or historical conditions/practices that constitute the threat at the local, regional or national level.
C. Describe the recent, traditional, or historical measures (management, cultural norms) at the community, regional or national level that have been applied in the past in an attempt to manage these resources.
D. Explain how these conditions/practices threaten the resource. Published articles may be useful here.
E. Describe the apparent social causes of the threat. For example, unsustainable practices whether legal or illegal, may be the result of poverty or lack of understanding of ecosystem functioning. The causes of the threat may not be immediately apparent but representatives from the host organization and other local experts can offer an explanation. Students should assess the reasoning behind these explanations through personal observations and with published sources that describe similar threats in other locations.
F. How can the threat you described above be reduced or eliminated? What do you think would be the best way to conserve the resource while meeting the needs of the community? Again, published sources will be helpful here.

Section B: Conservation Work Objectives and Experience (50% of paper)
A. Describe the host organization for which you worked.
B. Identify and explain the key conservation objectives of the host organization’s conservation project.
C. Describe what your experiences in conservation entailed. How did the work you performed contribute to the project’s objectives and conservation of the natural resource? If it did not, why not?
D. How do the conservation objectives of the project address the natural resource threat and how do they compare to your own suggestions for conserving the resource? Explain any incompatibility between the project’s objectives and your suggestions. How could this be remedied? For example, does a lack of specialized equipment or personnel prevent the host organization from adequately addressing the threat to the natural resource?
E. What were the main resources and/or management tools that were employed to meet the objectives of the project?
F. Does the host organization receive any funding from outside sources? If not, how do they maintain their operations?
G. What are the challenges and opportunities for local resource managers? Describe any current conflicts between the host organization and local communities and discuss the probable motivations of each opposing party. Suggest possible solutions to these conflicts or ways to enhance cooperation, and address the ramifications for each party if your suggestions were realized.

Section C: Overall Experience and Conclusion (10% of paper)
A. What have you learned about conservation from your work experience and related research?
B. What have you learned about yourself, your values and your preferences? Identify any changes in attitude and awareness you have taken away with you from this experience.
C. Provide a brief synthesis of the two-week program in terms of the environmental, cultural and personal lessons you have learned.

N.B. Completed papers must be submitted for grading to the Instructor of Record, Auburn University (in MS Word format) via email to morsewc@auburn.edu. Students will receive a reminder email from ISV with their paper due date (which is 28 days after the completion of a four-week program or six weeks after the completion of the volunteer project).

**Tips for Writing a Quality Term Paper**

a. Follow the paper outline (including formatting requirements).

b. Use an appropriate (academic) style and tone in your writing.

c. Be concise.

d. Follow the guidelines for citing and listing appropriate references to support your work (see below).

e. Use your field journal as a resource when writing your paper (but do not cite this as a reference).

f. Avoid using direct quotes from references; instead, paraphrase relevant information from the source, followed by a citation.

g. Citations within the text should include only the last name of the author(s) and year of source publication (note: for three or more authors, use first author and ‘et. al.’ in citation and full author list in bibliography).

h. List references alphabetically in a bibliography. Include full name of author(s), date of publication, article/book title, journal title, journal pages (also publisher and city of publication for books).

i. Be sure to spell out any acronyms used for the first time.

j. Start the paper with an introduction and end the paper with a proper conclusion.

k. Carefully proof-read your paper for grammar, sentence structure, punctuation, clarity and flow of ideas before submitting it, as these will affect your grade. Do not forget to spell-check!

l. Allow yourself enough time to write a well thought-out and organized paper.

m. Take advantage of your ISV Instructor as a resource person during the program and discuss ideas for your paper in advance with him/her.

**Acceptable sources for six required references (minimum):**


II. University level textbooks.

III. Published technical and scientific reports by national governments, international organizations (e.g. World Bank, UNEP, UNESCO etc.), non-governmental organizations (e.g. World Wildlife Federation, World Resources Institute, Rainforest Alliance, etc.), or scientific associations or projects (e.g. Human Dimensions of Global Environmental Change).

The following may also be used as reference material in addition to the required references:

A. Non-academic magazines and web-sites;

B. Reports from advocacy or non-governmental organizations (e.g. World Wildlife Fund, Sierra Club, etc.);

C. Encyclopedias;