Objectives of the Course:
The main objectives of the course are:
- Collaborate with organizations (preferably community-based organizations) and develop useful information system solutions to meet real management needs.
- Apply systems analysis and design principles and techniques to design an information system.
- Apply software engineering principles and techniques to implement, test and install the information system.

Learning Outcomes:
Upon completion the students should be able to learn how:
- Use information technology effectively,
- Demonstrate effective teamwork and leadership, and
- Apply sound project management may be combined to enable innovative information systems with added value.

Course Contents:
Showcase of Proposed Projects:
Sophia Foundation for Children Event Management System

The Problem
The Sophia Foundation for Children is a non-profit organization that provides assistance to less fortunate children in Kenya through a number of activities including shelter and meal programs. The Sophia Foundation organizes a number of fundraising events. UNIC faculty and students support the Sophia Foundation. Managing volunteer records and assignments of volunteers to events has been a difficult and time consuming process.
The solution

It is expected that the team would design and built a 'Volunteer Management System' for the Sophia Foundation for Children. This web based application would allow individuals to apply as volunteers and request to volunteer online. Volunteer administrators are enabled to manage all events, volunteers, and volunteer requests through an administrative interface. In addition, an on-site component would allow time tracking (check-in, check-out) to be used on-site at every volunteer event.

**Praxis**

The Problem

The aim of this project is to create a website where anyone could view the global activity of people who have recently viewed, read, or performed a play of Greek Drama. An interactive global map would display points to identify the locations of these people. Users would be able to add to the map by choosing the play they are working with and their own location. Users would be able to see where else in the world their particular play is being enjoyed. The clients wanted the site to be visually appealing and easily accessible to people all over the world, regardless of what language they speak.

The Solution

The solution may employ Yahoo! Maps to generate a customized Flash map that utilizes the functionality required. Custom markers for the map that demonstrate the magnitude of users in areas with a greater density of users may be created. The envisioned solution would be built in a highly customizable manner, so that it can be used for media items other than the works of Greek Drama in the future.

**Bib-help**

The Problem

Creating bibliographies is a time consuming task. This is due to the strict requirements of inclusion for such arcane information like a publisher’s city and very precise formatting for how each entry should be presented. The goal of the Bib-Help web application would be to accelerate the process of writing a bibliography. It does this by automatically filling in the data to complete a bibliography entry.

The Solution

The BIB-HELP is envisioned to be a bibliography maker that auto-fills. It would feature a simple intuitive interface for users to find bibliographical information for their source supporting the most frequently cited sources, i.e. Book, Magazine, Newspaper, Website, Journal, Interviews, Radio/TV, and Encyclopedia entries. It is envisioned that the system would support Harvard, MLA, APA, Chicago and Turabian citation styles.

**Teaching Methods:**

| Mentoring, Guided reading, Software Testing and Evaluations |

**Assessment Methods:**

| Thesis, Presentation |
## Recommended Textbooks/Reading:

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Publisher</th>
<th>Year</th>
<th>ISBN</th>
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<tbody>
<tr>
<td>Uma Sekaran and Roger Bougie A series of articles and best practices approaches on students’ intranet.</td>
<td></td>
<td>John Wiley and Sons Ltd</td>
<td></td>
<td>ISBN 978-0-470-74479-6</td>
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