COURSE DESCRIPTION

Dept., Number	CSci 305	Course Title	Software for Global Use
Semester hours	3	Course Coordinators	H. Conrad Cunningham, Professor Steven Schoenly, Associate Professor Emeritus

Current Catalog Description

Study of the principles and practice of software internationalization with emphasis on the design and customization of software to accommodate linguistic and cultural diversity.

Textbook

Andy Deitsch and David Czarnecki, *Java Internationalization*, O'Reilly, 2001.

References

Class website: http://www.cs.olemiss.edu/~sbs/305spring2005/

Course Outcomes

Upon successful completion of this course, the students:

1. understand the cultural, linguistic, and technical issues related to internationalization and localization of software,
2. can use the Java API facilities for internationalization and localization,
3. are able to present technical material in oral and written forms.

Relationship between Course Outcomes and Program Outcomes

This is an elective course taken by undergraduate computer science students to enrich their programs. It was taught in the Spring semesters of 2003 and 2005 by a professor who is now retired. Course outcome 1 contributes to program outcome (g), course outcome 2 contributes to program outcome (i), and course outcome 3 contributes to program outcome (f).

Prerequisites by Topic

1. Basic data structures and algorithms (CSci 112, 211)
2. Intermediate-level programming expertise (CSCI 211)

Major Topics Covered in the Course

1. Review of Java string and input/output facilities.
2. Introduction to internationalization
3. Writing systems and locales
4. Formatting messages
5. Character sets and Unicode.
6. Searching, sorting, and text boundary detection.
7. Fonts and text rendering
8. Internationalized Graphical User Interfaces.
9. Input methods.
10. Internationalized Web applications.

Assessment Plan for the Course

This is an elective course taught in Spring 2003 and Spring 2005 by a professor who is now retired. An offering typically had 12 assignments and 4 exams. Several assignments included class presentations by students. Course outcome 1 was assessed by components of 6 assignments and questions on all 4 exams. Course outcome 2 was assessed by components of 11 assignments and questions on all 4 exams. Course outcome 3 was assessed by class presentations of at least 3 assignments and written components of at least 2 assignments. For a potential future offering of this course, the course coordinator and new instructor will discuss the course with the previous instructor to determine any needed changes in course content, organization, and pedagogy.

How Data in the Course are Used to Assess Program Outcomes (unless adequately covered already in the assessment discussion under Criterion 4)

Estimate Curriculum Category Content (Semester hours)

Area	Core	Advanced	Area	Core	Advanced
Algorithms		1	Software design		1
Data structures			Concepts of programming languages		1