**SOUTHERN LUZON STATE UNIVERSITY**

**COLLEGE OF INDUSTRIAL TECHNOLOGY**

**Lucban, Quezon**

***VISION STATEMENT:*** *Southern Luzon State University as an academic hub of excellent curricular programs, transdisciplinary researches, and responsive extension services that contributes to knowledge production, social development, and economic advancement of Quezon province and the CALABARZON Region.*

***MISSION STATEMENT:*** *The university is committed to develop a sustained culture of delivering quality services and undertaking continuous interdisciplinary innovations in instruction, research and extension in the fields of agriculture, science, engineering, technology, allied health and medicine, human security, business. and the arts anchored to the development needs of Quezon province and the CALABARZON Region and national and global development goals.*

***CORE VALUES:***

***GO*** *– God-loving*

***S*** *– Service-oriented*

***L*** *– Leadership by Example*

***S*** *– Sustained Passion of Excellence*

***U*** *– Undiminished Commitment to Peace and Environment Advocacy.*

***COLLEGE OF INDUSTRIAL TECHNOLOGY GOAL***

*Develop competent Industrial Technology graduates who are highly responsive to the changing needs of the regional, national, and global community and to produce world class professional equipped with industrial and technical competencies as potential industry leader and job provider.*

|  |  |  |
| --- | --- | --- |
| **Program Educational Objectives**  *In 3-5 years after graduation, BS Information Technology graduates are expected to:* | | **Goals and Objectives** |
| **1** |
| 1 | Demonstrate global skill and professional competence in the field of Information Technology. | **√** |
| 2 | Exhibit professional success through promotions and/or positions of increasing responsibility. | **√** |
| 3 | Demonstrate life-long learning via progress toward completion of an advanced degree, professional development or related training courses and certification/s. | **√** |

**COURSE SYLLABUS**

**1. Course Code: ITE24**

**2. Course Title: COGNATE/PROFESSIONAL COURSE 3**

**(Elective)**

**3. Pre-Requisite: None**

**4 Co-Requisite: None**

**5. Credit/ Class Schedule: 10:30-1:30 | T**

**10:30-1:30 | TH**

**10:30 – 12:30 | F**

**6. Course Description**:

This course provides an in-depth exploration of dynamic web development, focusing on building interactive, database-driven websites and web applications. Students will learn essential programming languages, frameworks, and tools used in modern web development, including HTML, CSS, JavaScript, PHP, Node.js, and databases like MySQL or MongoDB. The course covers both front-end and back-end development, emphasizing server-client interactions, API integration, and security best practices.

**7. Program Outcomes and Relationship to Program Educational Objectives:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Program Outcomes** | | **Program Educational Objective** | | |
| **1** | **2** | **3** |
| A | Apply knowledge of computing, science, and mathematics appropriate to the discipline. |  |  |  |
| B | Understand best practices and standards and their applications. | √ | √ | √ |
| C | Analyze complex problems and identify and define the computing requirements appropriate to its solution. | √ | √ | √ |
| D | Identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems. | √ | √ | √ |
| E | Design, implement, and evaluate computer-based systems, processes, components, or programs to meet desired needs and requirements under various constraints. | √ | √ | √ |
| F | Integrate IT-based solutions into the user environment effectively. | √ | √ | √ |
| G | Apply knowledge through the use of current techniques, skills, tools, and practices necessary for the IT profession. | √ | √ | √ |
| H | Function effectively as a member or leader of a development team recognizing the different roles within a team to accomplish a common goal. | √ | √ | √ |
| I | Assist in the creation of an effective IT project plan. | √ | √ | √ |
| J | Communicate effectively with the computing community and with society at large about complex computing activities through logical writing, presentations, and clear instructions. | √ | √ | √ |
| K | Analyze the local and global impact of computing information technology on individuals, organizations, and society. | √ | √ | √ |
| L | Understand professional, ethical, legal, security and social issues and responsibilities in the utilization of information technology. | √ | √ | √ |
| M | Recognize the need for and engage in planning self-learning and improving performance as a foundation for continuing professional development | √ | √ | √ |

**8. Course Objectives and Relationship to Program Outcomes:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Course Objective** | | **Program Outcomes** | | | | | | | | | | | | |
| **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** | **L** | **M** |
| 1 | Define and identify cognates and false cognates. |  | √ |  | √ | √ | √ | √ |  | √ |  | √ | √ | √ |
| 2 | Recognize the historical and phonological processes that create cognates. |  | √ |  | √ | √ | √ | √ |  | √ |  | √ | √ | √ |
| 3 | Analyze the semantic shifts that may occur in cognate words. |  | √ |  | √ | √ | √ | √ |  | √ |  | √ | √ | √ |
| 4 | Utilize cognates to improve language comprehension and vocabulary acquisition. |  | √ |  | √ | √ | √ | √ |  | √ |  | √ | √ | √ |
| 5 | Compare cognate relationships between different language pairs. |  | √ |  | √ | √ | √ | √ |  | √ |  | √ | √ | √ |
| 6 | Understand the linguistic and cultural significance of cognates. |  | √ |  | √ | √ | √ | √ |  | √ |  | √ | √ | √ |
| 7 | Apply cognate analysis skills to related disciplines, such as etymology and translation. |  | √ |  | √ | √ | √ | √ |  | √ |  | √ | √ | √ |

**9. Course Outline and Timeframe: Lecture**

|  |  |
| --- | --- |
| **Week** | **Topics** |
| **1** | **Course Orientation:**  *1.1 SLSU Vision and Mission and Core Values*  *1.2 College Goals and Program Objectives*  *1.3 Program Outcomes*  *1.4 Course Outcomes*  *1.5 Course Outline*  *1.6 Corse Grading System*  *1.7 Course Requirements*  *1.8 Overview of the subject* |
| **2** | **Introduction to web development**   * Front end development * Back end development * Fullstack development |
| **3** | **PHP Introduction**   * What you should know? * What is PHP? * What can PHP do? * PHP installation |
| **4** | **PHP Introduction**   * Characteristics of PHP * Why should we uses PHP? * PHP Basics * Basic Syntax * PHP Variables * PHP Datatypes * PHP Strings * Concatenate |
| **5** | **Databases**   * Connecting database to webpages * Mysql as database server |
| **6** | **Prelim Examination** |
| **7** | **PHP Method**   * Get and Post Method * Advantages and Disadvantages of Get and Post Method |
| **8** | **PHP Forms**   * Form handling * Form validation * Form required |
| **9** | **PHP Advanced**   * PHP Date and time   ***Create a php for file handling*** |
| **10** | **Registration form** |
| **11** | **Login form** |
| **12** | **Assessment Midterm Examination** |
| **13** | **Project Development**   * Project proposal |
| **14** | * Database connection |
| **15-16** | * Project Development |
| **17** | * Project Presentation |
| **18** | **Assessment (Final Examination)** |

**10. Suggested Readings and References Link:**

*DevDocs — JavaScript documentation*. (n.d.). https://devdocs.io/javascript/

Frain, B. (2012). *Responsive Web Design with HTML5 and CSS3*. https://openlibrary.org/books/OL27085482M/Responsive\_Web\_Design\_with\_HTML5\_and\_CSS3

FreeCodeCamp.org. (n.d.). <https://www.freecodecamp.org/learn/2022/responsive-web->design/learn-html-by-building-a-cat-photo-app/step-1

JavaScript | MDN. (n.d.). MDN Web Docs. <https://developer.mozilla.org/en->US/docs/Web/JavaScript

Javascript. (n.d.). https://developer.mozilla.org/en-US/docs/Web/JavaScript

**11. Course Requirements:**

* Requirements of the course may include quizzes, exams, projects, and other outputs as required by the instructor needed for students learning.
* Google classroom will be used as a repository of resources and for the submission of requirements.
* Classes will be conducted either in synchronous or asynchronous mode.
* Quizzes and examinations
* Class participation and discussions
* Group projects and presentations
* Final project

**12. Grading System:**

Students must earn 75% or higher in order to pass this course. Requirements submitted, examinations taken, and student’s portfolio will be evaluated accordingly.

Performance Outputs 40%

Recitation (class participation) 15%

Long Exam (Prelim, Midterm, Final) 30%

Quizzes 15%

**TOTAL**  **100%**

**13. Classroom Policies:**

Aside from academic deficiency, other grounds for a falling grade are:

* Failed to submit the requirements needed in this course
* Grave misconduct and/or cheating during examinations
* Other violation/s in the student code of the university

**14. Consultation Hours:** Tuesday to Thursday | 9:30 – 11:30

**15. Course Outcomes and Relationship to Course Objectives / Program Outcomes:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Course Outcome** | | **Course Objectives** | | | | | | |
| *A student completing this course should at the minimum be able to:* | | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| 1 | Define the differences of static and dynamic website. | √ | √ | √ | √ |  | √ | √ |
| 2 | Understand how to integrate front-end and back-end components to create a complete web application. | √ | √ | √ | √ |  | √ | √ |
| 3 | Understand the principles of user experience (UX) design and user interface (UI) design. | √ | √ | √ | √ |  | √ | √ |
|  |  |  |  |  |  |  |  |  |