**COURSE SYLLABUS**

**2ndSemester, AY 2015-2016**

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| **Course Information** | | | **Faculty Information** | | | |
| **Course Code:** | | COME 429 | **Name:** | | | Luke Nigel J. Laylo |
| **Course Title:** | | Web Design and Programming 1 | **Office:** | | | Department of Computer Engineering |
| **Credit Units:** | | 3 | **Email:** | | | *lukelaylo@gmail.com* |
| **Pre-requisites:** | | COME 419 | **Phone:** | | | (032) 2300100 local 263 |
| **Schedule:** | | 10:30 AM – 1:30 PM THU CN Lab |
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|  | |  | **Consultation Time:** | | | |
|  | |  | 10:30 – 1:30 PM MTW | | | |
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| **Course Description** | | | | | | |
| This course is designed to provide the students with the knowledge and skills necessary to create web applications. The course will cover the following topics: Client and Server Side Scripting, Database Technology and MVC | | | | | | |
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| **COURSE OUTCOMES (CO)** | | | | | | |
| *By the end of the semester, students should be able to:*  **CO1:** Create web applications using various Client and Server Side Scripting.  **CO2:** Design a normalized database for web applications.  **CO3:** Develop a solution based on a given problem using web principles and techniques. | | | **Alignment to Program Outcomes** | | | |
| *The learning outcomes in this course are* ***introductory*** *to the achievement of:*  **[9]**An ability to engage in life-long learning and to keep current of the development in a specific field of specialization.  *The learning outcomes in this course are* ***enabling*** *to the achievement of:*  **[5]**An ability to identify, formulate and solve computer engineering problems.  **[11]**An ability to use appropriate techniques, skills, and modern tools necessary for computer engineering practice to be locally and globally competitive.  *The student outputs in this course are* ***demonstrative*** *of the achievement of:*  **[3]**An ability to design a system to meet desired needs. | | | |
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| **ASSESSMENT OF OUTCOMES** | | | | | | |
| As evidence of having achieved the outcomes, students must produce quality outputs and/or carry out tasks successfully. | | | | | | |
| **Formative**  For **CO1, CO2 & CO3**:Hacktivities / Hackathome (Rubric-Based) | | | **Summative**  For **CO1**: Compilation of Hacktivities / Hackathome (Non-Rubric Based)  For **CO2**: Hackathon (Rubric-Based)  For **CO3**: Project(Rubric-Based) | | | |
| **Assessment Rubrics (See Annex 1)**   |  |  | | --- | --- | | Output/Performance | Rubric No. & Title | | Hacktivities / Hackathome | [COME429-100] Hacktivity / Hackathome Rubrics | | Hackathon | [COME429-200] Hackathon Rubrics | | Project | [COME429-300] Project Rubrics | | | | | | | |
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| **Grading System**  The student’s grade for the course is computed based on both formative and summative assessment data. The computation is detailed below. | | | | | | |
| **Grade Component Weight**  *Hacktivity / Hackathome* (30%)  *Hackathon* (30%)  *Project* (40%) | | | **Computation**  H/H Grade (average) x 0.30  HKT Grade(average) x 0.30  Project x 0.40  Total **Grade**  **Passing Grade:3.0**  **Condition for Passing:** Grade must be 3.0 or better. | | | |
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| **LEARNING PLAN** | | | | | | |
| **Course Outcome** | **Topics** | | | **Week** | **Learning Activities** | |
|  | Introduction to Course   1. Internet Technology 2. World Wide Web | | | 1 | * Establishing prior knowledge and conceptual understanding: Internet Technology and World Wide Web * Open Forum | |
| **CO1** | **Client Side Scripting**   1. The Hypertext Markup Language (HTML) 2. Cascading Style Sheets 3. JavaScript 4. Designing Web Pages with HTML and CSS 5. Web Hosting | | | 2 – 3 | * Hands-on exercises (hands-on laboratory activities with given specifications that will be given to students every meeting during the lecture-discussion). * Hacktivity (hands-on laboratory activities that will be given to students every meeting after the lecture-discussion) * Hackathome (hands-on laboratory activity which students can work at home * Design websites using Client Side Scripts * Host website on the internet | |
| **CO1** | **Web Programming**   1. The Hypertext Transfer Protocol (HTTP) 2. Server Side Scripting 3. Syntax and Variables 4. Echo / Print 5. Data Types 6. String Functions and Operators 7. Conditional Statements (If...Else...Elseif, Switch) 8. Loops (For, While, Do While) 9. Functions 10. Arrays 11. Include | | | 4 | * Web Server Installation * Hacktivity / Hackathome * Develop Web Applications using Client and Server Side Scripts * Peer Discussion | |
| **CO2** | **Database Technologies**   1. Introduction to Database 2. Entity Relationship Diagram (ERD) 3. Database Normalization 4. Structured Query Language (SQL) 5. Other advanced database topics | | | 5 - 6 | * Hacktivity / Hackathome * Database Designing * SQL Scripting | |
| **CO1**  **CO2** | **Web Programming and Database**   1. Server Side Scripting and Database    1. Insert    2. Retrieve    3. Update    4. Delete 2. Other Server Side Scripting    1. Sessions / Cookies    2. File Upload    3. Date    4. Classes / Objects | | | 7 – 9 | * Web Applications Development with Database Systems * Hacktivity / Hackathome * Hackathon (Practical Exam) | |
|  | **MIDTERM EXAMINATION** | | | 10 |  | |
| **CO1**  **CO2** | **Web Frameworks**   1. Introduction to Web Frameworks 2. MVC Framework (Model-View-Controller) 3. Frontend and Backend Programming using Web Frameworks 4. Database and Web Frameworks | | | 11 – 14 | * Web Applications Development using Frameworks * Hacktivity / Hackathome | |
| **CO3** | **Project Development**   1. Project Proposal 2. Project Development / Consultation | | | 15 – 17 | * Pitch Firing – Students will propose their project idea. They will have no slides or props - just themselves and a smile. Only selected project ideas can proceed to project development. * Project Development * Peer Discussion | |
| **CO3** | **Project Presentation and Defense** | | | 18 | * Presentation and Defense | |
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| **Learning Resources** | | | | | | |
| **Websites**   * <http://www.php.net> * <http://www.w3schools.com> * http://www.mysql.com * <http://ellislab.com/codeigniter> * http://www.html5rocks.com   **Online Resources**  Use of online resources (e-books, tutorials, presentations, videos, lectures, and other supplementary materials) regarding further discussions on web applications and web technologies are encouraged. | | | | | | |
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| **Course Policies** | | | | | | |
| * **Attendance and Tardiness**   You are expected to attend all classes. The USC Student Manual (2013 Edition) stipulates that “a student who incurs unexcused absences of more than 20% of the prescribed number of class hours or laboratory periods during the term should be given NC or 5.0.” A 3-unit course has 48 class hours and a 1-unit laboratory course has 16 laboratory periods. You do the math.  Tardiness is highly discouraged and habitual tardiness will not be condoned. Appropriate sanctions for tardiness will be given based on agreement reached during a one-on-one conference between you and me. If you come late to class, silently make your way to your seat without disrupting ongoing activity.   * **Use of Gadgets in Class**   Gadgets should only be used in class in aid of learning. It’s allowable that you go online in the classroom if you want to find out more about something on the topic being taken up. In no way that you are allowed to use your gadgets in class to do social networking, games, or other activities that have no direct bearing on the ongoing class activity. You may take pictures of what is written on the board but only after I expressly announce when you can do it. At all times, set your gadgets on silent mode.   * **Classroom Behavior**   In class, students are expected to behave in a manner that would not unnecessarily disrupt classroom activities. The instructor reserves the right to expel misbehaving students from the classroom.   * **Consultation**   My consultation periods are indicated in this syllabus. Should you wish to consult with me on matters pertaining to your achievement of the learning outcomes, you can inform me through the class email or personally. You may do so individually or as a group. | | | | | | |
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| Prepared by  **Luke Nigel J. Laylo** Faculty | Approved by  **Engr. Antoniette P. Mondigo** Department Chair |
| Date Submitted for Approval: **Nov. 21, 2015** | Date Approved: |

**[COME429E-100] Hacktivity / Hackathome Rubrics**

**Rubric 1. Assessing and Grading of Hacktivity and Hackathome(CO1)**

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| --- | --- | --- | --- | --- | --- |
| Level Criteria | Weight | Excellent(1.0) | Acceptable(2.0) | Marginal(3.0) | Not Acceptable(4.0) |
| Specifications | 60% | The program works and meets all of the specifications. | The program works and produces the correct results and displays them correctly.  It also meets most of the other specifications. | The program produces correct results but does not display them correctly. | The program is producing incorrect results. |
| Delivery | 40% | The program was delivered on time. | The program was delivered a week after due date. | The code was 2-3 weeks of the due date. | The code was more than 3 weeks overdue. |

**[COME429-200] Hackathon Rubrics**

**Rubric 2. Assessing and Grading of Hackathon(CO2)**

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| Level Criteria | Weight | Excellent(1.0) | Acceptable(2.0) | Marginal(3.0) | Not Acceptable(4.0) |
| Specifications | 100% | The program works and meets all of the specifications. | The program works and produces the correct results and displays them correctly.  It also meets most of the other specifications. | The program produces correct results but does not display them correctly. | The program is producing incorrect results. |

**[COME429-300] Project Rubrics**

**Rubric 3. Assessing and Grading on Project (CO3)**

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| Criteria | Weight | Excellent(1.0) | Acceptable (2.0) | Marginal(3.0) | Not Acceptable (4.0) |
| Target and Purpose | 25% | Very strong understanding of who the site was created for.  All elements of the site are engaging and appropriate for the target audience. | Site has a clear purpose.  Major elements of the site are appropriate for the target audience. | Purpose may be somewhat unclear.  Target audience is identified, and some choices are appropriate for this audience. | Site lacks a sense of purpose.  No indication that the site was created for a target audience other than teacher-as-grader. |
| Functionality | 25% | Functionality intrigues target audience and enhances purpose.  Simple and powerful navigation structures make navigation feel intuitive.  All functionality, works properly.  Creative use of interactivity enhances purpose of the site.  Is using MVC | May not work as intended, or may not meet the needs of the target audience.  Functionality is appropriate for target audience and accomplishes the purpose Simple navigation structures make site quite easy for user.  Appropriate use of interactivity for the purpose of the site. | Navigation structures may be awkward or difficult to use.  Some elements of functionality may not work as intended, or may not meet the needs of the target audience | User becomes lost in navigating on or between pages.  Problems with functionality frustrate the user. |
| Graphic Elements | 20% | Creative design causes backgrounds and other formatting elements to work exceptionally well together.  Graphic elements are used in imaginative and effective ways. | Graphic elements are good quality.  Graphic elements contribute to meaning Graphic design principles are followed. | Inconsistent quality of graphic elements.  Graphics are used as ‘add-on’s’ rather than as an element of meaning.  Some awareness of graphic design principles is evident. | Poor quality of graphic elements.  No sense of purpose for the inclusion of graphic elements.  Little or no evidence of design principles |
| Layout | 15% | Page layout is creative and effective.  Layout effects and extends the ideas and content | Page layout is interesting and appropriate for content.  Layout is appropriate for the content. | Page layout may be ‘busy’ or unimaginative.  Unreflective use of a template | Layout of pages is confusing, or cluttered or dull.  Layout does not reflect ideas and content, but seems arbitrary |
| Organization | 15% | Headings create hierarchy and intrigue reader.  First paragraphs of longer text intrigue reader s and draw them into the text | Headings and first paragraphs of longer text create appropriate hierarchy.  First paragraphs of longer text interest reader to go further into the text | Headings do not create a consistent hierarchy and/or entice reader to go further into the text.  Paragraphs may be long or incomplete | Headings or paragraph breaks are not used to create hierarchies or orient reader to text. |
| Delivery | 10% | The program was delivered on time. | The program was delivered a week after due date. | The code was 2-3 weeks of the due date. | The code was more than 3 weeks overdue. |