Course outline for

Best Programming Practices (Server Side Programming – PHP) BCDE224

Semester Two, 2022

Kōrero whakatuwhera - Introduction

This outline contains important information about the delivery and assessment of this course. Read it carefully and if there is anything you do not understand please ensure you ask a staff member listed below for clarification.

Please refer to your **programme handbook** for all programme related information, for example programme structure and regulations, grade scale and assessment regulations. https://myara.ara.ac.nz/pages/student-admin/programme-information

Kā pouako – Academic staff

Name	Role	Phone	Office	Email address
Amit Sarkar	Course Convenor and Lecturer	940 8495	S168	Amit.Sarkar@ara.ac.nz
Dr Luofeng Xu	Moderator	940 8394	S156	Luofeng.Xu@ara.ac.nz
Mehdi Asgarkhani	Academic Manager	940 8126	N122	Mehdi.Asgarkhani@ara.ac.nz

Please email your tutor directly to organise an appointment.

Wātaka - Timetable

- Timetable information is available to all learners through https://myara.ara.ac.nz Calendar & Timetable.

- Noticeboards – Ground floor N Block and Levels 2 S Block

Kā rauemi kia tirohia – Required texts and resources

- No Required Texts

- Learning and Study Resources – to assist you in your study
  http://www.ara.ac.nz/services-and-support/library

- Moodle – for course resources
  https://moodle.ara.ac.nz

- Timetable Online – to find out rooms, staff members, etc
  https://ebsportal.ara.ac.nz/

Kā Pukapuka Āwhina Tauira / Reference to Student Handbooks

Learners should obtain a copy of the following:

- Ara Institute of Canterbury Ltd Enrolment Guide

- Programme Handbook

Each of these contains information for learners about a range of policies and procedures including:

- Recognition of Prior Learning (RPL)

- Aegrotat Applications/Impaired Performance/Alternative Assessment Times

- Dishonest Practices

- Referencing

Whakamāramatakacc- Course descriptor

Best Programming Practices
(Server Side Programming – PHP)   BCDE224

Credits	15	Level	6
EFTS	0.1250	Grade Scale	G29aa
Notional Learning Hours	150	Work Integrated Learning	0
Effective from	January 2019	Date of this version	May 2018
Pre-requisites	BCDE102		
Co-requisites	Nil		

Aim

To develop student competence in a programming language to an industry-recognised standard, so they produce commercially viable software.

Learning outcomes

On successful completion of this course the student will be able to:

1   Demonstrate ability to code to industry standards.

2   Demonstrate ability to implement a prototype system.

3   Apply knowledge of standards and tools to build complex systems.

Indicative curriculum

- Language competence to an industry certification level
- Database connectivity
- Form handling
- RESTful web services and AJAX
- Cookies and sessions
- Arrays and tables
- File handling
- Templates and regular expressions
- Security and password handling and encryption
- S.O.L.I.D.
- i18n (internationalisation) and localisation

Assessment

No	Assessment Type	Pass Criteria	Weighting	Outcomes Assessed
1	Practical Assessment 1		25%	1
2	Practical Assessment 2		25%	2
3	Portfolio	50%	50%	3

To pass this course, students must gain an average of at least 50% across all assessments, and gain at least 50% in Assessment 3.

Kā Aromatawai - Assessments

Assessment	Brief	Week of	Weighting
Practical Assessment 1	**Demonstrate ability to code to industry standards** Exercises to ensure that the learner can code to basic certification standard* and can use all standard language features. * e.g. Zend PHP certification or the coding style, language Highlights, Coding Practices, and Errors and Exception components of 'PHP: The Right Way.	Friday 16 September	25%
Practical Assessment 2	**Demonstrate ability to implement a prototype system** Plan, design, code, and write tests for the first iteration of a solution (a proof of concept) for a specified problem domain. The implementation of the solution will be assessed by peer review	Friday 30 September	25%
Portfolio	**Apply knowledge of standards and tools to build complex systems.** For a given problem domain, plan and produce subsequent iterations that refine a solution system. The portfolio must explain and evaluate the process by which the system was refined. The portfolio must demonstrate that the system functionality and performance meets requirements	Friday 11 November	50%

Note: Assignment submission details will be advised.

Kā tūmahi aromatawai – Assessment tasks

Teaching staff will provide you with specific details of what is required for each assessment in advance of the due date. This information may be uploaded to the appropriate course area in Moodle or be given to you in the form of a handout. Staff may also provide additional information, advice and tips regarding assessments during timetabled class sessions, so you are encouraged to attend class regularly.

Kā paearu – Assessment criteria / Marking schedule

Nearer the time of each assessment, teaching staff will provide you with information on the assessment criteria that will be applied and/or how marks will be awarded.

Read the up-to-date information on the BCDE224 Moodle site.

Maramataka – Course schedule

Week	Commencing	Topic
1	25 July	Introduction to PHP, MySQL and Apache. Overview of course and on-line resources
2	1 August	Arrays and tables
3	8 August	Classes, Objects and OO Concepts
4	15 August	Classes, OO Concepts and RESTful web services
5	22 August	Databases - Advanced Topics
6	29 August	Databases - Secured
7	5 September	OO values
Graduation Day Friday 9 September **Please check with your tutor if you have class**		
8	12 September	Cookies, Sessions, .ini, templates, passwords **Assessment 1 due**
9	19 September	SOLID
10	26 September	SOLID **Assessments 2 due**
Term Break Monday 3 October – Friday 14 October		
11	17 October	SOLID Regular Expressions
No Classes Monday 24 October – Labour Day Holiday		
12	24 October	SOLID Internationalization and Security
13	31 October	Assessment support
14	7 November	**50% final portfolio due**
No Classes Friday 11 November - Show Day Holiday		
15	14 November	Study Week
16	21 November	Exam Week
17	28 November	Exam Week

Note: Learners will be notified in advance if there are any changes to the course schedule.