

COMP.6210

Web Services and Design Methodologies

***Course Outline:*** *Semester 2, 2019*

Nau mai, haere mai! Welcome!

This outline will give you the key course information you require as an enrolled student. It advises the main purpose of the course, what the course learning outcomes are, assessment details, the delivery and assessment schedule for the course, and any specific requirements or regulations relating to this course. Please consult your lecturer for any further information or clarification you may require.

Lecturer/Office Information: Kaiako/Pūrongo Tari

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| --- | --- | --- | --- |
| **Faculty/Department** | **Location** | **Phone** | **Email** |
| ECTI | Mokoia, Rotorua  Windermere, Tauranga | (07) 346 8889 | mereiro.hepi@toiohomai.ac.nz |

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| **Staff Name** | **Designation** | **Phone** | **Email** |
| Jeff Kranenburg | Lecturer (TGA) | (07) 557 8557 | jeffrey.kranenburg@toiohomai.ac.nz |
| Bruce Tuhakaraina | Lecturer (ROT) | (07) 3468721 | Bruce.tuhakaraina @toiohomai.ac.nz |
| Kaveeta Dutt | Programme Manager | (07) 346 8670 | Kaveeta.Dutt@toiohomai.ac.nz |

*Please remember that your lecturers teach several classes, and also require preparation time in their offices for planning classes, marking and other work. If you wish to talk to a lecturer outside of class time, please politely contact your lecturer and ask for an appointment. The most effective way of doing this is to email your lecturers or leave a message on their voicemail.*

Learner Support: Taunakitanga o te Ākonga

Toi Ohomai’s team of Learning Advisors provides free support to all Toi Ohomai students to be successful in their studies and achieve their goals. They work alongside lecturers to provide the best possible support for our students’ learning. Students are assisted by Learning Advisors with: planning their time; searching for information and resources; writing assignments; studying for exams. We encourage all of our students to reach their full potential by making effective use of learner support. Contact your lecturer for a referral to a learning advisor.

Moodle: Online Learning/ī-Paenga: Ako ā-Ipurangi

This course is not available as a full online ‘distance’ course. However, it will be supported by various resources being made accessible online. Students will need to be registered to access the available resources. It is not imperative or required that students have a personal computer to access Moodle, however, it is recommended that students regularly visit this course’s Moodle page, which can be accessed via the Toi Ohomai website: [www.toiohomai.ac.nz](http://www.toiohomai.ac.nz).

*Please contact your lecturer if you cannot reach the Moodle page, as there may be a delay with student enrolments. If you are not fully enrolled in the course, you may not have access.*

**Please check that you can access your online resources with your lecturer so that you can keep up to date with your course details!**

Course Details

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| --- | --- | --- | --- | --- | --- |
| **Course Level** | 6 | **Course Credits** | 15 | **EFTS** | .125 |
| **Pre-requisites** | Nil | | **Co-requisites** | Nil | |

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| --- | --- | --- | --- | --- | --- |
| Teacher-directed Learning Hours | 78 | **Total Self-directed Learning Hours** | **72** | **Total Learning Hours** | **150** |
| Directed Practical/Work Experience Hours | 0 |
| **Total Directed Learning Hours** | **78** |

Course Aim

Students will be able to design and implement programmatically controlled web based interfaces for electronic commerce and programme the main sub-components of electronic commerce. Students will apply and analyse functionality design issues in online commerce.

Learning Outcomes and Content

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| --- | --- |
| **LEARNING OUTCOMES (refer to graduate profile mapping)** | **CONTENT** |
| On successful completion of this course, students will be able to:   1. Use a server side scripting language to create web applications incorporating data base connectivity; dynamic page generation, authentication and demonstrating data security. 2. Understand service orientation. 3. Create and utilise one or more web services. 4. Write a web application that utilises an external web service. 5. Analyse issues that exist in a server-side programming environment. 6. Perform testing and maintenance on Web Applications. | Introduction to tool selection and architecture in relation to Web Services & Design Methodologies  Introduction to the basic concepts of Model View Controller (MVC)  Understanding service orientation  Create and use a web application using external services (such as: simple object access protocol (SOAP) and representational state transfer (REST))  Investigate issues that exist in multi-tiered server side environments (such as: strengths, weaknesses, security and programming issues)  Create, use and test a database and a web application with connectivity and security |

Assessment

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| --- | --- | --- | --- |
| **Assessment No.** | **Assessment Type** | **Learning Outcomes Assessed** | **Percentage Weighting** |
|  | Assignment | 1, 6 | 30% |
|  | Assignment | 3, 4 | 40% |
|  | Examination | 1, 2, 5, 6 | 30% |

Requirements for Successful Completion

This course is assessed using achievement-based assessment. Students must attempt and/or submit all assessment tasks at the time, due date and at the place stipulated in the Course Outline.

Course Calendar: Ngā Wā Kōhi

Please consult the ***Toi Ohomai online timetable*** for class venue, date and time details. Use the course code as your search basis.

The timetable is subject to change and all *updates are made to the ONLINE timetable only*

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| --- | --- | --- | --- | --- |
| **Week** | **Date** | **Class** | **Topic Covered** | NOTES |
|  | 22/07/19 | 1. & 2 | * Introduction * Multi-tiered server environments * Intro to Web Services |  |
|  | 29/07/19 | 1 & 2 | * Web methodologies * HTML + CSS Revision | **ASSN 1 + 2 Release** |
|  | 05/08/19 | 1 & 2 | * JavaScript * Pulling in data from API |  |
|  | 12/08/19 | 1 & 2 | * Intro to PHP |  |
|  | 19/08/19 | 1 & 2 | * Building a PHP application |  |
|  | 26/08/19 | 1 & 2 | * OOP * MySQL Syntax * PDO Connection |  |
|  | 02/09/19 | 1 & 2 | * MVC Part 1 | **ASSN 1**  **Due** |
|  | 09/09/19 | 1 & 2 | * MVC Part 2 |  |
|  | 16/09/19 | 1 & 2 | * MVC Part 3 |  |
|  | 23/09/19 | 1 & 2 | * Send Mail * Add to Controller |  |
| **SEMESTER BREAK – BACK ON THE 14th of October** | | | | |
|  | 14/10/19 | 1 & 2 | * Unit Testing * TDD Development |  |
|  | 21/10/19 | 1 & 2 | * Unit Testing * TDD Development |  |
|  | 28/10/19 | 1 & 2 | * Working on Assignment | **ASSN 2**  **Due** |
|  | 04/11/19 | 1 & 2 | * Exam Prep |  |
| 1. 15 | 11/11/19 | 1 & 2 | Exam Week - No Class | EXAM  11th of Nov @ 9am |
| 1. 16 | 18/11/19 | 1 & 2 | Exam Week - No Class |  |

IMPORTANT NOTES:

1. While all efforts are made to ensure that the course calendar is correct, sometimes change is unavoidable. All reasonable effort will be made to advise enrolled students of any necessary changes. **Please ensure you have** valid email addresses and telephone numbers on your student file, and update these should they change. The best ways to stay informed are to come to class and visit Moodle regularly. Please use the online timetable only, as it is the most accurate and updated timetable.
2. If you have timetable clashes, consult your lecturer. Courses may be **subject to timetable constraints.** While Toi Ohomai does its best to allow your study plan to be achievable, all study plans are subject to timetabling constraints.

Regulations: Ngā Waeture

This course will be delivered and managed in accordance with the criteria specified in the Toi Ohomai Regulatory Framework, including the Academic Regulations and relevant Toi Ohomai policies and procedures. A copy of Toi Ohomai’s Academic Regulations is available on the Toi Ohomai website via the following web link: <https://toiohomai.ac.nz/toi-ohomai-regulations>

***Please consult your course lecturer for Regulations specific to the programme you are enrolled in.***