

# Course Directive IN607: Introductory Application Development Concepts Semester One, 2021

## Course Information

Credits: 15 Credits

Prerequisite: IN511: Programming 2

Recommended: IN512: Fundamentals of Web Development Timetable: Tuesday 10 AM D207 & Thursday 8 AM D207

### Lecturers

Name: Adon Moskal (Principal Lecturer) Grayson Orr (Lecturer)

Office: D205b D311

Email: adon.moskal@op.ac.nz grayson.orr@op.ac.nz

#### Course Dates

Term 1: 22 February - 16 April (8 weeks) Mid Semester Break: 19 April - 30 April (2 weeks) Term 2: 03 May - 25 June (8 weeks)

Easter Tuesday: 06 April

#### Aims

To introduce the concepts of application development including algorithms, data structures & design patterns that are required to use a simple, industry-relevant development framework.

# **Learning Outcomes**

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

1. Design & build usable, secure & attractive applications with dynamic database functionality following an appropriate software development methodology.

# **Provisional Schedule**

Week	Date	Session		
1	22-02-2020	PHP - Basics		
2	01-03-2020	Laravel 1 - REST APIs & Postman		
3	08-03-2020	Laravel 2 - API Validation & Relationships		
4	15-03-2020	Laravel 3 - PHPUnit & Deployment		
5	22-03-2020	ES6 - Revisit		
6	29-03-2020	React 1 - Create-React-App & JSX		
7	05-04-2020	React 2 - Components & Props		
8	12-04-2020	React 3 - State & Lifecycle		
Mid Term Break				
9	03-05-2020	React 4 - Forms		
10	10-05-2020	React 5 - Forms		
11	17-05-2020	Project Work		
12	24-05-2020	Project Work		
13	31-05-2020	Project Work		
14	07-06-2020	Project Work		
15	14-06-2020	Project Work		
16	21-06-2020	Project Work		

## Assessments

Assessment	Weighting	Due Date	Learning Outcomes
Practical	20%	23-06-2020	1
Project	80%	23-06-2020	1

## Resources

#### Software

This paper will be taught using Laragon & Microsoft Visual Studio Code. An installer for Laragon & Microsoft Visual Studio Code is available - https://laragon.org/download & https://code.visualstudio.com/download. Please refer any problems with downloads or installers to Rob Broadley in D205a.

# Readings

There is no textbook for the course.

# Course Requirements & Expectations

## **Learning Hours**

This course requires 150 hours of learning. This time includes 64 hours of timetabled class time, & 86 hours of self-directed reading, preparation & completion of assessments.

#### Criteria for Passing

To pass this paper, you must achieve a cumulative pass mark of 50% over all assessments. There are no reassessments or resits.

#### Attendance

- Learners are expected to attend all classes, including lectures & labs.
- If you cannot attend for a few days for any reason, contact the course.

#### Communication

Microsoft Outlook/Teams are the official communication channels for this course. It is your responsibility to regularly check Microsoft Outlook/Teams & GitHub for important course material, including changes to class scheduling or assessment details. Not checking will not be accepted as an excuse.

#### Snow Days/Polytechnic Closure

In the event **Otago Polytechnic** is closed or has a delayed opening because of snow or bad weather, you should not attempt to attend class if it is unsafe to do so. It is possible that the course lecturer will not be able to attend either, so classes will not physically be meeting. However, this does not become a holiday. Rather, the course material will be made available on GitHub for classes affected by the closure. You are responsible for any course material presented in this manner. Information about closure will be posted on the **Otago Polytechnic Facebook** page <a href="https://www.facebook.com/OtagoPoly">https://www.facebook.com/OtagoPoly</a>.

#### Group Work & Originality

Learners in the **Bachelor of Information Technology** programme are expected to hand in original work. Learners are encouraged to discuss assessments with their fellow learners, however, all assessments are to be completed as individual works unless group work is explicitly required (i.e. if it doesn't say it is group work then it is not group work – even if a group consultation was involved). Failure to submit your original work will be treated as plagiarism.

#### Referencing

Appropriate referencing is required for all work. Referencing standards will be specified by the course lecturer.

#### **Plagiarism**

Plagiarism is submitting someone elses work as your own. Plagiarism offences are taken seriously & an assessment that has been plagiarised may be awarded a zero mark. A definition of plagiarism is in the Student Handbook, available online or at the school office.

### Submission Requirements

All assessments are to be submitted by the time, date, & method given when the assessment is issued. Failure to meet all requirements will result in a penalty of up to 10% per day (including weekends).

#### Extensions

Extensions are only available for unusual circumstances. These must be applied for, & approved, before the submission date.

### **Impairment**

In case of sickness contact the course lecturer or **BIT Team Leader (Michael Holtz)** as soon as possible, preferably before the assessment is due. The policy regarding the granting of a mark that considers impaired performance requires a medical certificate & a medical practitioner's signature on a form. You may refer to the guide on impaired performance on the student handbook.

### **Appeals**

If you are concerned about any aspect of your assessment, approach the course lecturer in the first instance. We support an open-door policy & aim to resolve issues promptly. Further support is available from the BIT Team Leader (Michael Holtz) & Head of College (Richard Nyhof). Otago Polytechnic has a formal process for academic appeals if necessary.

#### Other Documents

Regulatory documents relating to this course can be found on the Otago Polytechnic website.