



Programming Fundamentals 1

Course Outline & Essential Information



Produced
by

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Dr. Siobhán Drohan

Ms. Mairead Meagher

Department of Computing & Mathematics

South East Technological University

Waterford, Ireland

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Course Outline & Essential Information

Introducing Programming Fundamentals 1

Module Description and Assessment...



This document describes
the module and how we
will approach it



Outline

- ☐ Lecturer Details
- ☐ How to Contact me
- ☐ Learning Technologies
- ☐ Course Purpose
- ☐ Course Structure and
- ☐ Course Document



Lecturer Details

- ❑ David (Dave) Drohan (BSc, MSc)
- ❑ Lecturer in Department of Computing and Mathematics (in SETU)
- ❑ Programme Leader, BSc (Hons) in Software Engineering
- ❑ david.drohan@setu.ie
- ❑ WeChat ID: dave-drohan-setu





Lecturer Details – Module Areas

- ☐ Object Oriented Programming
- ☐ Data Structures
- ☐ Systems Analysis & Design
- ☐ GUI Development
- ☐ Web App Development
- ☐ Mobile App Development (Android)
- ☐ Programming Fundamentals 1 😊



How to Contact me

- ❑ The best way to reach me will be via **Slack** so please join the **Programming Fundamentals 1 Slack workspace** (via tutors site or direct link)
 - If you need to contact me directly, please **DM** rather than using public channels
- ❑ or if you prefer, email me at david.drohan@setu.ie
- ❑ or via WeChat at [dave-drohan-setu](#)



Learning Technologies

- ❑ **Moodle** - our learning management system (used all over SETU), where you can find links to the notes, and where online exams are curated. The link to this course will be available soon. Most weeks you will be given a list of activities to have done before the class and a list of activities to have done before the next week. (need to be enrolled first though...)
- ❑ **Zoom** - If, for some reason, we need to use Zoom for remote working, we will generally send the Zoom link via the Slack channel.



Learning Technologies

- ❑ **Slack** - Slack is a messaging app for companies with organised spaces called channels – a different one for everything that we're working on. We will use Slack for all our day-to-day communication for the module.
- ❑ **Tutors** - This static website will hold all the notes, labs and links to videos (if we need them). This site is organised by **topic**, as opposed to Moodle which is organised by **week** (by linking to, among other things, the relevant tutors topic). (can be accessed immediately with a Github account)



Learning Technologies

□ Slack

<https://pf1-nuist-2024.slack.com/>

□ Tutors

<https://tutors.dev/course/prog-fund-1-nuist-2024>



Course Purpose


- ❑ Introduce **Java & Programming Fundamentals 1** through Case Studies and targeted practical labs on a week by week basis





Course Purpose

- ❑ Introduce Java & Programming Fundamentals 1 through Case Studies and targeted practical labs on a week by week basis



Assumptions:

NO level of Java or closely related language expected

Every topic explores specific Java features *in parallel* to the labs



Assessment



Assessment details for
Programming
Fundamentals 1.

00: Introduction



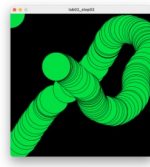
Module details for
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01: Processing Intro



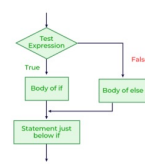
processing · java · drawing
shapes · colour · grayscale
· RGB · syntax errors ·...

02: Animation



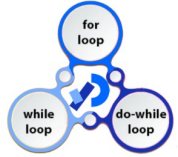
animating simple drawings
· variables · system
variables · primitive dat...

03: Selection/Events



conditional statements ·
relational & logical
operators · variables ·...

04: Iteration (Loops)



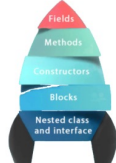
iteration · for loops · while
loops · variable scope ·
compound assignment...

05: Methods



method signature · return
types · parameters · mouse
event & bespoke methods

06: Methods/Classes



return types · parameters ·
classes

07: IntelliJ & Spot



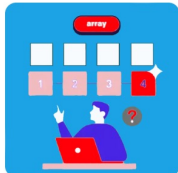
IntelliJ · Java Virtual
Machine (JVM) · main
method · Scanner · Spot

08: Shop & Basic I/O



IntelliJ · Scanner · OO
recap · ShopV1

09: Arrays in Java



Overview · primitive arrays
· object arrays

10: Shop and Arrays



primitive arrays · basic
menu driven systems ·
Shop V2

Supplementary Materials



Validation in a nutshell,
this., toString()

Course Structure



Assessment



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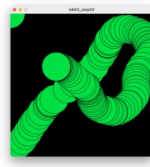
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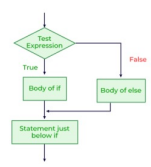
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Course Structure

MCQ 1



Assessment



Assessment details for
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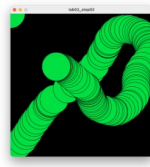
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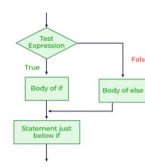
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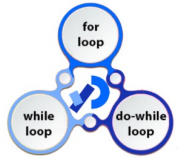
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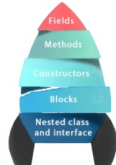
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return types · parameters ·
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Course Structure

MCQ 2



Assessment



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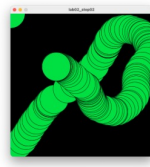
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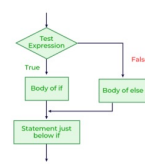
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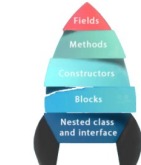
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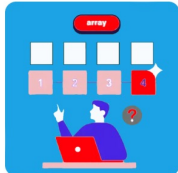
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Course Structure

Team Project



Assessment

- ❑ 100% Continuous Assessment Module (15%, 45%, 40%)
- ❑ 1 Team Based Assignment, Teams of 3 – Due week 15 and 2 Multiple Choice Question (MCQ) Exams, Weeks 4 & 8
- ❑ Demos Week 13 (TBC)
- ❑ Project Ideas MUST be unique AND all your own original work (mostly!)
- ❑ 1st come 1st served approach to Project Titles
- ❑ 10% +2% per day deduction for every day late

We'll talk about the Assignments in more detail later on

Assessment Schedule



		M	T	W	T	F	S	S
September		26	27	28	29	30	31	1
	1	2	3	4	5	6	7	8
	2	9	10	11	12	13	14	15
	3	16	17	18	19	20	21	22
	4	23	24	25	26	27	28	29
October	5	30	1	2	3	4	5	6
	6	7	8	9	10	11	12	13
	7	14	15	16	17	18	19	20
	8	21	22	23	24	25	26	27
November	9	28	29	30	31	1	2	3
	10	4	5	6	7	8	9	10
	11	11	12	13	14	15	16	17
	12	18	19	20	21	22	23	24
December	13	25	26	27	28	29	30	1
	14	2	3	4	5	6	7	8
	15	9	10	11	12	13	14	15
	16	16	17	18	19	20	21	22
	17	23	24	25	26	27	28	29
January		30	31	1	2	3	4	5

Assessment Schedule

MCQ Exam 1



	M	T	W	T	F	S	S
September	26	27	28	29	30	31	1
1	2	3	4	5	6	7	8
2	9	10	11	12	13	14	15
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Teams
Submitted

Assessment Schedule



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MCQ Exam 2

Assessment Schedule



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Team Project
Specification

Assessment Schedule



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Team Project
Submission

Assessment Schedule



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MCQ Exam 1

MCQ Exam 2

Teams
Submitted

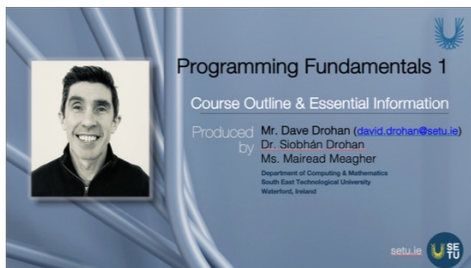
Team Project
Specification

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Course Document



Programming Fundamentals 1 Semester 1 – 2023 - 2024



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Questions? 问题





Questions are Good – so ASK!
问题很好，所以提问





如果你不能用英语提问，可
以找一个能帮你提问的人





谢谢



