Massey University School of Engineering and Advanced Technology (SEAT)

159.272 Programming Paradigms 2018

Paper Outline

Calendar Prescription

A study of modern programming paradigms with an emphasis on object-oriented and functional languages, such as Java and Haskell, and including hybrid languages, such as Scala and Ruby. The selection of appropriate languages for real-world applications, such as user-interface construction and concurrent programming, is a focus of this paper.

http://www.massey.ac.nz/massey/learning/programme-course-paper/paper.cfm?study_year=2017&paper_code=159.272

Learning Outcomes

Students who successfully complete this paper will be able to:

- 1. Select appropriate programming languages for real-world applications.
- 2. Apply the principles of object-oriented program design in a practical setting.
- 3. Apply the principles of functional program design in a practical setting.
- 4. Use modern programming constructs appropriately and effectively.

Requirements

Prerequisite(s): 159.1x1 and 159.1x2Restriction(s): 159.202, 159.234

Offerings

- internal Manawatu Campus
- extramural

E-Learning Category

Partially Taught Online - as part of the paper is taught online, broadband access is required. In addition to accessing the Paper Outline, students will be required to access core and supplementary digital study resources, contribute to discussion for and complete online activities and assessment tasks.

Teaching Staff

Dr Amjed Tahir (Offering coordinatar - HEBUT)

Email: a.tahir@massey.ac.nz

Web Site: https://sites.google.com/site/amjedtahir

A/Prof Jens Dietrich (Paper Coordinator – Massey New Zealand)

Email: j.b.dietrich@massey.ac.nz

Web Site: https://sites.google.com/site/jensdietrich/

Tutors

1. Shawn Rasheed unshorn@gmail.com

Assessment

Assessment	Due Date / Deadline	weighting	Late Penalty	Paper completion requirement
Assignment 1	tba	15%	no late submissions allowed	see below
Assignment 2	tba	15%	no late submissions allowed	see below
Laboratory exercises	weekly, starting in week 2	10%	no late submissions allowed	see below
Examinations	see exam timetable	60%	n/a	compulsory

The turnaround time for assignments will be no more than three weeks from the due date. It is important to note that the specified timeframe applies only to those assignments submitted by the due date, and does not necessarily apply to those submitted late.

Additional Requirements for Paper Completion

To pass the paper students have to attend the final examination.

Failure to complete this requirement will lead to a DNC unless covered by the Aegrotat Regulations. To pass the paper students have to achieve at least 40% in the final examination and have an overall total of at least 50%.

Final examination dates:

http://www.massey.ac.nz/massey/learning/exams/timetables/timetables_home.cfm

Timetable:

http://www.massey.ac.nz/massey/learning/timetables/class-timetable_home.cfm

Tutorials for extramural students will be run via Adobe Connect once a week, URL to be advised on stream. We will discuss a suitable time that suits most using the stream forum in week 1.

Student Time Budget

A 15 credit paper equates to 12.5 hours per week, studying 4 papers full time equals 50 hours per week.

Conditions for Aegrotat Pass and Impaired Performance

If you are prevented by illness, injury or serious crisis from attending an examination (or completing an element of assessment by the due date), or if you consider that your performance has been seriously impaired by such circumstances, you may apply for aegrotat or impaired performance consideration. You must apply on the form available from the Examinations Office, the Student Health Service or the Student Counseling Service.

To qualify for an aegrotat pass on the final examination, you must have attempted at least 40% of the total formal assessment and your performance must be well above the minimum pass standard, so that the examiners can be confident that you would have passed the paper if you had completed the final examination. You may also apply for aegrotat consideration for other compulsory assessment elements (such as Semester Tests) that occur at a fixed time and place if you are prevented by illness, injury or a serious crisis from attending.

Plagiarism

Massey University, College of Sciences, has taken a firm stance on plagiarism and any form of cheating. Plagiarism is the copying or paraphrasing of another person's work, whether published or unpublished, without clearly acknowledging it. It includes copying the work of other students. Plagiarism will be penalized; it is likely to lead to loss of marks for that item of assessment and may lead to an automatic failing grade for the paper and/or exclusion from reenrollment at the University.

Grievance Procedures

A student who claims that he/she has sustained academic disadvantage as a result of the

actions of a University staff member should use the University Grievance Procedures. Students, whenever practicable, should in the first instance approach the University staff member concerned. If the grievance is unresolved with the staff member concerned, the student should then contact the College of Sciences office on his/her campus for further information on the procedures, or read the procedures in the University Calendar.