COMPUTER SCIENCE (ITC315118)

EXTERNAL ASSESSMENT SPECIFICATIONS

External Assessment Specifications inform the development of external assessments. The primary audience for this document is the course Setting Examiner and Exam Critics. It may also be of use to teachers and students.

These specifications must be read in conjunction with the current Course Document on the TASC website.

The external assessment for this course consists of a written exam.

FORMAT AND STRUCTURE

The written exam is THREE hours.

Students will have an additional 15-minute preparation time during which students can take notes on the note paper provided and highlight any key words in the exam booklet during the allocated time. Students will not be permitted to start their exam until advised by the Exam Supervisor.

The written exam includes FIVE sections.

CRITERIA TO BE ASSESSED

The criteria to be externally assessed are:

Criterion 1: design, extend and improve algorithmic solutions to a range of problems

Criterion 2: create programs in a high-level programming language

Criterion 3: use appropriate objects in the design of programs

Criterion 4: describe and apply knowledge of computer architecture

Criterion 5: analyse how data are represented and stored

SPECIFIC MATERIALS AND EQUIPMENT APPROVED FOR USE BY STUDENTS

The current TASC ITC315118 Computer Science Information Sheet will be provided for use in the written exam.

TASMANIAN ASSESSMENT, STANDARDS & CERTIFICATION

ASSESSMENT

All criteria are assessed numerically.

A set of solutions or a marking tool will be developed by the Setting Examiner, provided to markers at the marking meeting that follows the external written exam; and will be available from TASC in the following year.

The algorithm to achieve final rating from Sections A – E will take account of the fact that each section carries equal time weight.

NUMERICAL MARK ALLOCATION

Exam papers are designed so that the number of marks allocated to a section, part or question corresponds to the recommended time allocation for it. This is so that a student knows when answering a 10 mark question that the question has been designed for students to spend approximately 10 minutes reading, thinking and then answering the question. Students may find that they spend less or more time on certain questions throughout the exam.

SECTION A

Structure

- This section will take students approximately 36 minutes to respond to and be allocated 36 marks for Criterion 1.
- All THREE questions are compulsory. Where questions have multiple items, all items are compulsory.
- Each question is worth a total of 12 marks.
- This section will address course content from Area 1: problem solving and programming.

Assessed Criteria

- Criterion 1: design, extend and improve algorithmic solutions to a range of problems (all Elements).

Nature of Questions

- Questions will be focussed on algorithm design and problem solving.

Nature of Responses

- Responses will be assessed numerically.
- Questions may require written and diagrammatic responses.

SECTION B

Structure

- This section will take students approximately 36 minutes to respond to and be allocated 36 marks for Criterion 2.
- All THREE questions are compulsory. Where questions have multiple items, all items are compulsory.
- Each question is worth a total of 12 marks.

- This section will address course content from Area 1: problem solving and programming.

Assessed Criteria

- Criterion 2: create programs in a high-level programming language (all Elements).

Nature of Questions

- Questions will be focussed on programming language.

Nature of Responses

- Responses will be assessed numerically.
- Questions may require written and diagrammatic responses.

SECTION C

Structure

- This section will take students approximately 36 minutes to respond to and be allocated 36 marks for Criterion 3.
- All THREE questions are compulsory. Where questions have multiple items, all items are compulsory.
- Each question is worth a total of 12 marks.
- This section will address course content from Area 1: problem solving and programming.

Assessed Criteria

- Criterion 3: use appropriate objects in the design of programs (all Elements).

Nature of Questions

- Questions will be focussed on the use of objects.

Nature of Responses

- Responses will be assessed numerically.
- Questions may require written and diagrammatic responses.

SECTION D

Structure

- This section will take students approximately 36 minutes to respond to and be allocated 36 marks for Criterion 4.
- All THREE questions are compulsory. Where questions have multiple items, all items are compulsory.
- Each question is worth a total of 12 marks.
- This section will address course content from Area 2: computer fundamentals and computer limitations.

Assessed Criteria

- Criterion 4: describe and apply knowledge of computer architecture (all Elements).

Nature of Questions

- Questions will be focussed on computer architecture.

Nature of Responses

- Responses will be assessed numerically.
- Questions may require written and diagrammatic responses.

SECTION E

Structure

- This section will take students approximately 36 minutes to respond to and be allocated 36 marks for Criterion 5.
- All THREE questions are compulsory. Where questions have multiple items, all items are compulsory.
- Each question is worth a total of 12 marks.
- This section will address course content from Area 2: computer fundamentals and computer limitations.

Assessed Criteria

- Criterion 5: analyse how data are represented and stored (all Elements).

Nature of Questions

- Questions will be focussed on data representations.

Nature of Responses

- Responses will be assessed numerically.
- Questions may require written and diagrammatic responses.