

## SCIF30006 Project Marking Criteria (21 point scale)

The university are updating their marking criteria; this is designed to help you understand what to aim for, and also to improve consistency. You can learn more about this and see the overall criteria at this link: <https://www.bristol.ac.uk/academic-quality/assessment/regulations-and-code-of-practice-for-taught-programmes/marking-criteria/>. The components of this exercise are going to be marked against the following criteria:

For the coding component: A modified version of Knowledge, replacing literature with coding best practice; Problem-Solving and Specialist Skills & Techniques. For the report component: Critical Approach, Explanation & Interpretation, Research and Communication. In the tables below, I have collated these criteria; I have also aligned them to the criteria we have used in some of your earlier SCIF units so you can map them onto each other. This will hopefully help your understanding. While we transition, we'll make every effort to be clear and consistent, but if you have any questions, please ask.

NF, 25/02/2025

**For the coding component:**

Mark	%	Knowledge	Problem-Solving	Specialist Skills & Techniques	Old Criteria
20	100	Highly detailed knowledge and understanding of the main theories and/or concepts of the discipline(s). Represents best practice.	Confident in identifying key aspects of complex problems and applying appropriate approaches to their solution, showing initiative, autonomy and creativity.	Consistent demonstration of accomplished and exceptionally innovative application of the discipline's specialist skills and the capable and effective application of its advanced techniques.	<i>Excellent with Outstanding Aspects</i> All parts of the task have been completed with significant useful extra code which goes beyond the brief. The code/analysis is very clear and consistent (e.g. useful comments, easily understandable variable names, all defined variables are used) throughout with excellent documentation. The code functions to a high standard and is robust with excellent programming style used throughout with no errors.
19	94				
18	83				
17	78	Excellent knowledge and understanding of the main concepts and key theories/ concepts of the discipline(s). Represents mostly best practice.	Well-developed problem-solving skills showing ability to identify key aspects of complex problems. Is effective and shows initiative and autonomy in using appropriate resources for addressing them.	Consistent demonstration of accomplished and innovative application of the discipline's specialist skills as well as the informed application of its advanced techniques.	<i>Mostly excellent (16 &amp; 17)</i> All parts of the task have been completed with useful extra code that goes beyond the brief. The code/analysis is clear and consistent throughout, with very good documentation. The code functions to a high standard and is robust with mostly excellent programming style used throughout with no errors.
16	75				
15	72				<i>Mostly very good (14 &amp; 15)</i> All parts of the task have been completed, performing all tasks asked for. The code/analysis is mostly clear and consistent throughout with good documentation. The code functions to a mostly very good standard, is robust and has very good programming style used throughout,
14	68	Systematic and coherent understanding of the field(s) of study. Represents best practice, but could have minor weaknesses.	Shows ability to identify key aspects of complex problems and is effective in using appropriate resources for addressing them.	Consistent demonstration of capable and effective application of the discipline's specialist skills and evidence of developing and applying its advanced techniques.	

Mark	%	Knowledge	Problem-Solving	Specialist Skills & Techniques	Old Criteria
					with no major weaknesses and no errors.
13	65				<i>Mostly good (13 &amp; 12)</i> All parts of the task have been completed, performing all tasks asked for. The code/analysis is mostly clear and consistent but may not be fully documented. The code functions to a mostly good standard, is relatively robust with satisfactory programming style with no major weaknesses. May contain minor errors/bugs.
12	62				
11	58	Sound and broad understanding of field(s) of study, at a satisfactory programming standard. Some awareness of the relevance/ applicability and /or limitations of knowledge.	Shows ability to identify key aspects of complex problems and draws on appropriate resources for addressing them.	Consistent demonstration of the development and informed application of discipline-specific specialist skills.	<i>Mostly satisfactory (10 &amp; 11)</i> Most parts of the task have been completed, performing most tasks asked for. The code/analysis is mostly clear and consistent but may not be documented. The code functions to a mostly satisfactory standard, with mostly satisfactory programming style but there may be one or more errors which prevents part of it running correctly and it may not be robust.
10	55				
9	52				<i>Some satisfactory, some poor (8&amp;9)</i> Most parts of the task have been attempted, performing some tasks asked for. The code/analysis may be less clear and may lack consistency. Some parts of the code do work but errors prevent most of it working correctly.

Mark	%	Knowledge	Problem-Solving	Specialist Skills & Techniques	Old Criteria
8	48	Sufficient understanding to deal with key aspects of field or discipline, but with quite significant problems. Some awareness of more specialised content	Limited ability to identify the key aspects of complex problems and use appropriate resources to address them.	Demonstrates evidence of developing and applying discipline-specific specialist skills.	See above
7	45				<i>Mostly poor (6 &amp; 7)</i> Some parts of the task have been attempted but not the majority. The code/analysis is mostly unclear and lacks consistency. Code mostly not functional. Some significant parts could work in principle but contain serious errors.
6	42				
5	35	Gaps in knowledge, with only superficial understanding. Some significant inaccuracies.	Little evidence of an ability to isolate the key elements of complex problems and deploy appropriate resources to address them.	Has not demonstrated sufficient evidence of the development or application of discipline-specific specialist skills.	<i>Poor to unacceptable</i> Most of the exercise not completed. Code is not functional. Some significant parts could work in principle but contain serious errors
4	29				<i>Mostly unacceptable (3 &amp; 4)</i> Almost all of the exercise is not completed. Code is not functional. Some small sections of code could work in principle but contain serious errors
3	22				
2	15	Major gaps in knowledge and understanding of material at this level. Substantial inaccuracies.	Does not show ability to identify key aspects of complex problems or to use appropriate resources to address them.	No evidence of the development or application of the discipline's specific or specialist skills.	<i>Unacceptable (1 &amp; 2)</i> Almost all of the exercise is not completed. Code is not functional. Some evidence of effort and basic understanding but no parts could work even in principle.
1	7				
0	0				Work not handed in or no significant effort made to write code.

**For the project report:**

Mark	%	Critical Approach	Explanation & Interpretation	Research	Communication	Old Criteria
20	100	Exceptional critical awareness of the ambiguities and limitations of knowledge.	Sophisticated perception, critical insight and interpretation of complex matters and ideas.	Exceptionally successful in a wide range of research tasks, including evaluation, with a high degree of autonomy.	Can communicate effectively to a range of audiences in an engaging and professional manner, using a wide range of media as appropriate.	<i>Excellent with Outstanding Aspects</i> Clearly and logically laid out sections. All parts of the task have been addressed with significant extra analysis and discussion which goes beyond the brief. Excellent presentation. Outstanding command of critical analysis and judgment.
19	94					
18	83					
17	78	Excellent critical awareness of the limitations of the knowledge base	A thorough, perceptive and thoughtful interpretation of complex matters and ideas.	Can very successfully complete a range of research tasks, including evaluation, with a significant degree of autonomy.	Can communicate effectively to a range of audiences, using a wide range of media as appropriate.	<i>Some excellent, with the rest good</i> Clearly and logically laid out sections. All parts of the task have been addressed with extra analysis and discussion which goes beyond the brief. Very good presentation. Able to display a command of critical analysis and judgement.
16	75					
15	72					
14	68	Clear evidence of a critical awareness of the limitations of the knowledge base.	A thorough interpretation of complex matters and ideas	Can successfully complete a range of research tasks, including evaluation, with very limited guidance.	Can communicate effectively to a range of audiences, using a wide range of media as appropriate.	<i>Mostly good</i> Clearly laid out sections. All parts of the task have been addressed in a clear way. Good presentation of material. Able to employ critical analysis and judgement.
13	65					
12	62					

Mark	%	Critical Approach	Explanation & Interpretation	Research	Communication	Old Criteria
11	58	Limited evidence of a critical approach to the knowledge base.	Clear and consistent explanation of complex matters and ideas.	Can competently undertake reasonably straightforward research tasks with minimum guidance.	Is able to communicate appropriately to a range of audiences and shows some ability to deploy different media as appropriate.	<i>Mostly satisfactory</i> Sections may not be clearly laid out. Most parts of the task have been addressed with some analysis and discussion. Adequate presentation of material. Some grasp of issues and concepts underlying the techniques and material taught.
10	55					
9	52					
8	48	Little evidence of a critical approach to the knowledge base.	Some ability to explain some complex matters and ideas.	Can competently undertake reasonably straightforward research tasks with minimum guidance, but with minor weaknesses.	Shows some awareness of ways that communication needs to be adapted for different audiences.	<i>Mostly poor</i> May contain no sections. Some of the analysis and discussion has been attempted but is incomplete. Poorly presented. Some grasp of the issues and concepts underlying the techniques and material taught, but weak and incomplete.
7	45					
6	42					
5	35	No evidence of a critical approach to the knowledge base.	The student's explanations are weak and/or poorly constructed.	Limited evidence of being able to undertake straightforward research	Shows limited awareness of the ways communication needs to	<i>Poor to unacceptable</i> Most of the analysis is incomplete. Very poorly

Mark	%	Critical Approach	Explanation & Interpretation	Research	Communication	Old Criteria
				tasks without substantial guidance.	be adapted for different audiences.	presented. Deficient understanding of the issues and concepts underlying the techniques and material taught
4	29					<i>Mostly unacceptable (1-4)</i>
3	22					Incoherently presented with no clear attempt at analysis. Lack of understanding of the issues and concepts underlying the techniques and material taught.
2	15	No evidence of a critical approach to the knowledge base.	Substantial inconsistencies in line of reasoning	No evidence of being able to undertake straightforward research tasks without extensive guidance.	Shows very limited awareness of the ways communication needs to be adapted for different audiences.	No significant assessable material.
1	7					
0	0					