THE GLASGOW SCHOOL OF ART	**Course Specification**

Course Code:	**Session:**
PSGV203	2017/18

1. Course Title:
Serious Games Development

2. Version:	**Date of production:**	**Approval Date:**
1.1	2015/16	16 September 15 (PACAAG)

3. Level:
SCQF 11

4. Credits:
15

5. Lead School/Board of Studies:
School of Simulation and Visualisation

6. Course Contact:
Dr. Daniel Livingstone

7. Course Aims:

- Building on courses which introduce interactive visualisation and serious games design, provide an opportunity for students to put prior learning into practice to build practical skills in developing serious games from concept through to final product
- Prepare the student for an entry-level job in computer-based game development

8. Intended Learning Outcomes of Course:

On successful completion of the course the student will be able to:

1. design and develop serious games for their interested application domain using state-of-the-art game engines, various interaction devices and software;
2. demonstrate self-direction and ability to work with others through the development and management of a practical project

9. Indicative Content:

This course is a practice based course, with a focus on student led investigation and software design and development. Students are expected to cover issues including

- Current practices in serious game design and development
- Evaluation and assessment of serious games

Students may also integrate more advanced topics such as:

- Game interface: haptic devices, natural language interface, motion caption, brain-computer interface, etc.
- User modelling and intelligent adaptation in serious games
- Artificial intelligence in serious games

10. Description of Summative Assessment:

For this course, students are assessed through coursework. Coursework weighting: 100%

No.	Assessment Method	Description of Assessment Method	Weight %	Submission week (assignments) or length (exam)
1	Coursework	Small group project	80	12 (indicative)
2	Coursework	1000-2000 word reflective report project diary	20	12 (indicative)

10.1 Please describe the Summative Assessment arrangements:

The learning outcomes will be assessed through apair or group project to demonstrate competency in design and development of serious games using state-of-the-art game engines and interface devices, and apply knowledge and understanding of key issues of serious games (80%).
Learning outcome 2 will additionally be assessed with the aid of a final critical reflective report (1000 to 2000 words) and an appended project diary (20%).

11. Formative Assessment:

Individual feedback is available during tutorials to provide formative assessment. Individual written work is formatively reviewed by submission of draft text.

11.1 Please describe the Formative Assessment arrangements:

Feedback on work in progress is provided through tutorial sessions.

12. Collaborative:

Yes ☐	No ☒

12.1 Teaching Institutions:

3T

13. Requirements of Entry:

Students should have taken 'Interactive Heritage Visualisation' OR 'Applications in Medical Visualisation' OR equivalent
Students should additionally have taken 'Serious Games Design and Research' OR equivalent

14. Co-requisites:
None

15. Associated Programmes:
MSc Visualisation (Serious Games & Virtual Reality)

16. When Taught:
Spring Semester (Stage 2)

17. Timetable:
Timetable will be available in the induction week.

18. Available to Visiting Students:	
Yes ☒	**No** ☐

19. Distance Learning:	
Yes ☐	**No** ☒

20. Placement:	
Yes ☐	**No** ☒

21. Learning and Teaching Methods:		
Method	**Formal Contact Hours**	**Notional Learning Hours** (Including formal contact hours)
Lecture	6	12
Studio		
Seminar/Presentation		
Tutorial	14	28
Workshop		
Laboratory work		
Project work		110
Professional Practice		
E-Learning / Distance Learning		
Placement		
Examination		
Essay		
Private Study	Not Applicable	
Other (please specify below)		
TOTAL	**20**	**150**

22. Description of "Other" Teaching and Learning Methods:
3T

23. Additional Relevant Information:

24. Indicative Bibliography:
Journals: *The Simulation & Gaming: An Interdisciplinary Journal of Theory, Practice and Research*, Sage Publications *Entertainment Computing*, Elsevier *International Journal of Game-based Learning*, IGI Global. *Games for Health: Research, Development, and Clinical Applications*, Mary Ann liebert, Inc. Books: Gerasimov, V. and Kraczla, D. (2012) *Unity 3.x Scripting* Ma, M., Oikonomou, A., and Jain, L. (2011) *Serious games and Edutainment Applications*. Springer Ma, M. Oliveira, M., Pereira (2011) *Serious games Development and Applications: Proceedings of SGDA 2011*, Springer LNCS 6944 Ma, M., Oliveira, M., Baalsrud Hauge, J., Duin, H. and Thoben, K.D. (2012) *Serious Games Development and Applications: Proceedings of SGDA 2012*, Springer LNCS 7528