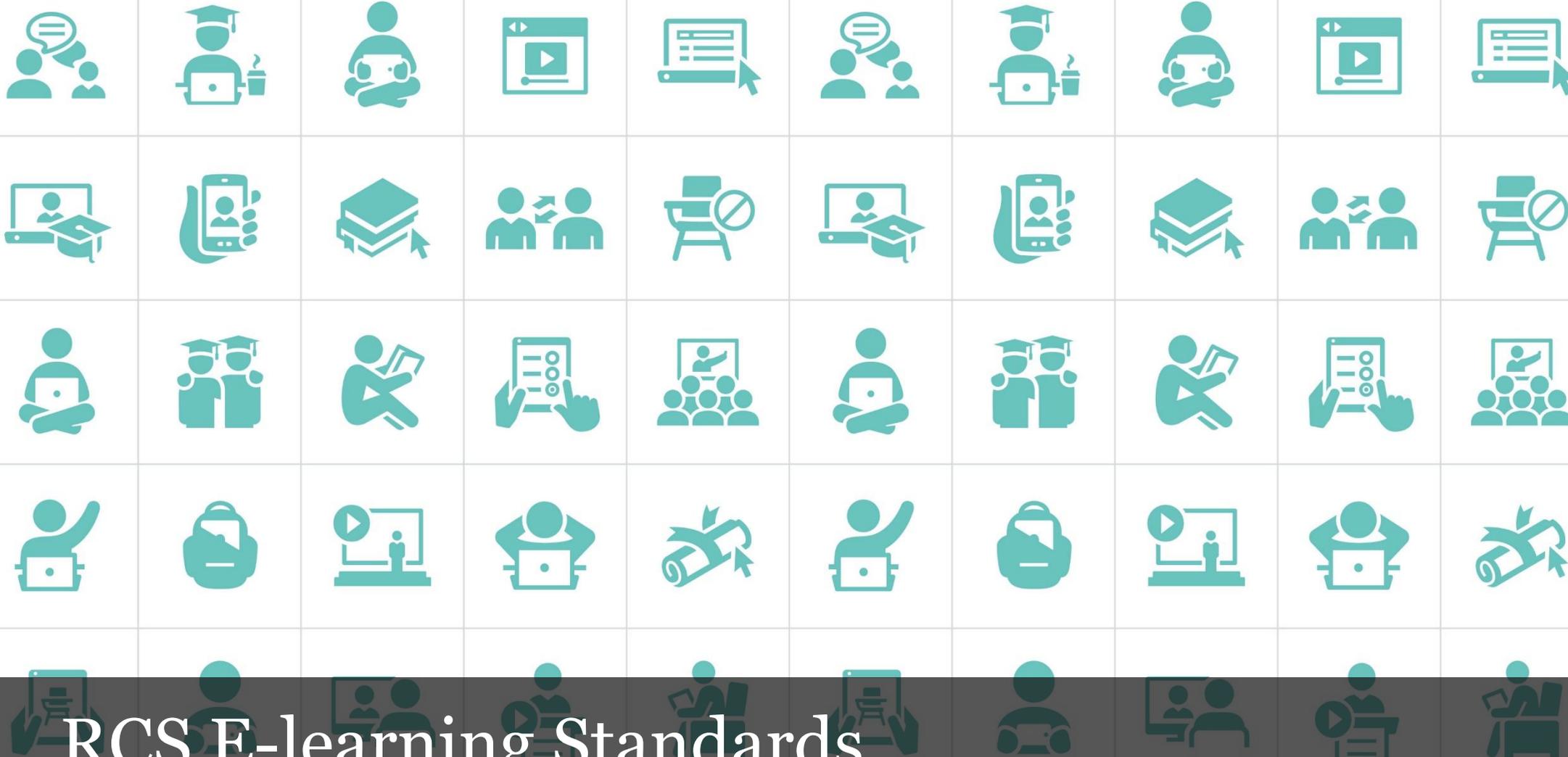




Royal College  
of Surgeons

ADVANCING SURGICAL CARE



# RCS E-learning Standards

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**The RCS E-learning Standards bring together best practice from a variety of fields. They are designed to guide quality assurance and improvement activities of RCS online courses, in order to ensure a high quality participant experience.**

## Introduction

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The E-learning Standards framework consists of nine categories, followed by key criteria applicable to all RCS online courses. It also provides clarifications and practical examples that will be useful to everyone involved in the design and development of our online offer. The nine categories are:

1. Structure
2. Orientation
3. Communication
4. Assessment
5. Resources
6. Cross-platform compatibility
7. Accessibility
8. Legal
9. Quality Assurance

In addition to this framework, the RCS E-learning Standards Checklist provides an easy method of reviewing and assessing a course's adherence to the standards.

The e-learning offer across RCS courses varies, depending on the stage they are at in the development cycle. Consequently, not all aspects of the standards will be relevant to all courses. However, we would expect a newly developed or redeveloped course to meet most of the key criteria in these nine categories. Where that is not possible, a note on the checklist should explain why an area has not been met or is not relevant.

## Benefits of use

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The standards and checklist aim to ensure consistency and improve the quality of the E-learning experience within a rapidly changing technological environment. Key benefits include:

- helping to articulate e-learning provision during a course development and encouraging course enhancement using the clarifications and examples;
- assisting in the review and quality assurance of e-learning in a systematic way, benchmarking provision and highlighting and addressing gaps as appropriate;
- providing a framework and checklist to guide and measure implementation of best practice over time;
- encouraging consistency across courses and consideration of E-learning best practice.

## Who is it for

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The standards are a guide for everyone involved in developing online provision. Those responsible for the programme should also use the checklist as part of the annual course review. Completed checklists should be kept for discussion during course redevelopments.

The RCS E-learning Standards are based on work from UCL, which has been adapted to meet our requirements. We will review the framework annually to ensure standards remain relevant, taking into consideration feedback and the latest best practice.

*“I appreciated the tick boxes to help track my progress.”*

*“The material was very informative... and gave me a good insight into what the course would comprise of.”*

Course participants  
*Intercollegiate Basic Surgical Skills*

# 1. Structure

Structure your course clearly to help users navigate quickly, understand the sequence of activities, access information and easily understand the course layout.	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
1.1. Use the RCS online course template	<ul style="list-style-type: none"> <li>• Give a consistent layout and experience for users and faculty.</li> </ul>
1.2. Provide a “tweet-length” summary	<ul style="list-style-type: none"> <li>• Ideally taken from the learning design workshop.</li> <li>• For use on category pages and search results.</li> </ul>
1.3. Present activities and resources in a logical, clearly structured and sequenced way	<ul style="list-style-type: none"> <li>• For example, chronologically or by theme – typically each Virtual Learning Environment (VLE) section represents a topic.</li> <li>• Use headings, for example, section headings for each topic area, and heading styles within labels, books and pages – maintains consistency across sections and helps users see where they are.</li> <li>• Provide section overviews – a description in each section to introduce the topic or set of resources/activities.</li> <li>• Group and label items clearly within a section – bring together common elements and use labels to provide common sub-headings across sections, to help users navigate.</li> <li>• Check navigation – does the navigation hierarchy make sense for every activity?</li> <li>• Guide users to the next task – may include hiding tasks until prerequisite tasks are completed, or until a certain date.</li> </ul>

1.4. Minimise cognitive load	<ul style="list-style-type: none"><li>• Avoid overloading the front page – place content off the main page in Pages, Books, Folders and Lessons.</li><li>• Ensure every activity is available using as few clicks as possible – ideally within three clicks.</li></ul>
1.5. Incorporate relevant visuals	<ul style="list-style-type: none"><li>• Consider a video introduction to the course, with diverse images of people if possible.</li><li>• Present information in a variety of media.</li><li>• Offer a visually interesting course while avoiding ‘eye candy’.</li></ul>

## 2. Orientation and expectation

Help learners orientate themselves, outlining how they are expected to learn and engage with the content	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
2.1. Include the Intended Learning Outcomes for the course, for activities and resources (as relevant)	<ul style="list-style-type: none"> <li>• Include in the introductory section, or via a link to a separate page – for activities and resources, they could be formulated as focus points to engage learning.</li> </ul>
2.2. Explain participation interactions	<ul style="list-style-type: none"> <li>• Outline how users are expected to use the VLE course through an introductory statement/welcome message.</li> <li>• Provide a summary of expectations for online engagement.</li> <li>• Identify mandatory and optional activities.</li> <li>• Explicitly signpost all online and offline activities.</li> <li>• Provide an indicator of the effort required (such as timings or page counts) for all mandatory tasks.</li> <li>• Use course and activity completion functionality.</li> </ul>
2.3. Incorporate an explanation of technical requirements	<ul style="list-style-type: none"> <li>• Either include within the introductory section or by linking to a site-wide resource page.</li> </ul>

## 3. Communication

Ensure effective and consistent online communication with users	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
3.1. Provide a communication statement	<ul style="list-style-type: none"> <li>Describe the communication methods for participants, faculty and administrators for different elements of the course</li> <li>Send reminders of completion requirements, with sufficient margin, before the face-to-face element.</li> </ul>
3.2. Display relevant contact details	<ul style="list-style-type: none"> <li>Include telephone and email as appropriate, depending on expected type of query.</li> <li>Incorporate course specific information into either the introductory section or a linked page.</li> <li>Include a readily visible link to the site-wide Help and/or FAQs page</li> </ul>
3.3. Use appropriate language directed towards the user	<ul style="list-style-type: none"> <li>Use the term 'you', for example, 'you should be able to...' rather than 'the learner should be able to...'.</li> </ul>

## 4. Assessment

Any assessment is focussed and relevant to learning with requirements clearly outlined.	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
4.1. Provide an assessment outline	<ul style="list-style-type: none"> <li>• Give a clear description of the course assessment, including schedule, criteria and submission details (if relevant).</li> </ul>
4.2. Provide a range of assessment methods (when relevant)	<ul style="list-style-type: none"> <li>• Use formative and/or summative assessments as appropriate to aid learning or test knowledge.</li> <li>• Use various methods, for example: MCQs, face-to-face, peer assessments, quizzes, assignments.</li> </ul>
4.3. Ensure assessments are linked to course content and learning outcomes	<ul style="list-style-type: none"> <li>• Specify which learning outcomes are assessed.</li> </ul>
4.4. Provide feedback on assessments	<ul style="list-style-type: none"> <li>• Provide model exemplars to guide expectations.</li> <li>• State what type of feedback the user can expect, and how soon (if not handled automatically).</li> <li>• Incorporate feedback into online quizzes and face-to-face discussions.</li> </ul>

## 5. Resources

Provide well-labelled relevant learning resources, using a variety of sources	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
5.1. Use descriptive titles for all items	<ul style="list-style-type: none"> <li>Consider displaying the item's description on the course homepage, to help users understand the purpose of the activity or resource (remembering to take care of cognitive load).</li> </ul>
5.2. Provide learning resources	<ul style="list-style-type: none"> <li>Provide presentation slides, notes or handouts where useful to enhance participant experience</li> </ul>
5.3. Provide pre/post course preparation (where relevant)	<ul style="list-style-type: none"> <li>May include reading lists, activity templates, self-reflection – outline which are mandatory and which are optional.</li> </ul>
5.4. Regularly check resources are reliable	<ul style="list-style-type: none"> <li>On project sign off and in yearly reviews, fix or remove broken hyperlinks (URLs) and check that all resources are up-to-date.</li> </ul>
5.5. Embed videos and other media	<ul style="list-style-type: none"> <li>For example, animations, audio, virtual labs.</li> </ul>

## 6. Cross-platform compatibility

Provide files in accessible formats to enable ease of use to participants including on mobile devices	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
6.1. Consider file formats	<ul style="list-style-type: none"> <li>• Provide pdf versions wherever possible, as they can be accessed on a variety of devices.</li> <li>• Use Word documents only for electronically-editable documents such as templates, worksheets or cover sheets.</li> <li>• Avoid niche proprietary technologies such as Flash, swf files and iSpring.</li> </ul>
6.2. Compress files	<ul style="list-style-type: none"> <li>• Minimise the file size, to aid users viewing them on mobile devices.</li> <li>• Display the file size and type alongside the filename, for example, Course Handbook (34MB pdf).</li> </ul>
6.3. Ensure content is fully usable in a range of modern browsers: Chrome, Safari, IE/Edge and Firefox	<ul style="list-style-type: none"> <li>• Test</li> </ul>
6.4. Ensure content is fully usable on Windows, iOS and Android	<ul style="list-style-type: none"> <li>• Test</li> </ul>
6.5. Ensure content is mobile friendly	<ul style="list-style-type: none"> <li>• Test on a range of devices.</li> <li>• Consider using % sizing (including fonts) rather than fixed sizes.</li> </ul>

## 7. Accessibility

Provide an accessible experience; include use of resources by following a few simple rules for the benefit of all users.	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
7.1. Provide accessible learning resources	<ul style="list-style-type: none"> <li>• Ensure graphics have alternative text for screen-readers.</li> <li>• Check navigation is consistent between courses.</li> <li>• Use MS accessibility checker for Office suite products.</li> <li>• Consider using % sizing (including fonts) rather than fixed sizes.</li> <li>• Ensure pdfs are text-based rather than image-based.</li> <li>• Ensure coloured text has high contrast against backgrounds.</li> <li>• Use links that are descriptive – avoid 'click here'.</li> <li>• Use tables only for tabular data, not for layout purposes – use other methods to get a tabular look</li> <li>• Provide video transcripts and captions, including within SCORM packages.</li> </ul>
7.2. Clearly signpost how links open	<ul style="list-style-type: none"> <li>• For example, '(opens in new window)'.</li> </ul>
7.3. Meet online learning standards in usability and accessibility using Web Content Accessibility Guidelines 2.1 (AA) <a href="https://www.w3.org/WAI/standards-guidelines/wcag/glance/">https://www.w3.org/WAI/standards-guidelines/wcag/glance/</a>	<ul style="list-style-type: none"> <li>• Check pages using WAVE <a href="https://wave.webaim.org/">https://wave.webaim.org/</a></li> </ul>

## 8. Legal

Model good copyright practices and ensure GDPR and data protection best practice.	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
8.1. Observe intellectual property and copyright legislation	<ul style="list-style-type: none"><li>• Link out to useful websites rather than copying text directly into a course.</li><li>• Use openly licensed or copyright-cleared images where possible.</li><li>• Avoid guest access (without a password) unless you are sure your material is copyright-cleared for open access – copyrighted/licensed material must only be supplied through a password protected system such as Moodle, which complies with the terms and conditions of the publishers and of the Copyright Licensing Agency licence.</li></ul>
8.2. Ensure the course complies with the RCS Privacy Policy: <a href="https://www.rcseng.ac.uk/privacy-policy/">https://www.rcseng.ac.uk/privacy-policy/</a>	<ul style="list-style-type: none"><li>• Ensure student-generated content (for example: discussion boards, blogs, wikis, videos) is stored on a password protected system.</li></ul>

## 9. Quality assurance

Enable stakeholders to anonymously evaluate online learning provision, to drive improvements.	
RCS E-learning Standards: key criteria for all online courses	Clarifications and examples of use in developing course content
9.1. Enable users to evaluate the course anonymously	<ul style="list-style-type: none"> <li>• Include any online elements, for example, via an end-of-course questionnaire.</li> </ul>
9.2. Encourage all stakeholders to contribute to the course/programme evaluation	<ul style="list-style-type: none"> <li>• Including any online elements, for example, by sending post-course reminders.</li> </ul>
9.3. Ensure course evaluation covers all aspects relevant to the use of technology for teaching and learning	<ul style="list-style-type: none"> <li>• Include quality of all course components (activities, resources, library provision), the E-learning experience (workload, involvement, restrictions), and the role of faculty and administrators (engagement, feedback, support).</li> </ul>
9.4. Review all courses yearly	<ul style="list-style-type: none"> <li>• Use the checklist to review all elements of a course's online offer and make improvements where possible – detail any non-adherence to standards.</li> </ul>



RCS E-learning Standards are based on the [UCL E-Learning Baseline](#) and are licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).

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