



**University of Edinburgh  
College of Medicine and Veterinary Medicine**

**MBCChB  
Student Selected Components**

# **SSC2a/SSC2b Study Guide for Students Principles for Practice II**

**Academic Year 2014/2015  
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## Key Information

### Contact Details

If you have any queries relating to SSC2a or SSC2b, please contact the SSC Secretary in the first instance. The SSC Secretary is based in Room GU316, on the Ground Floor of the Chancellor's Building on the Little France campus.

SSC Secretary

Telephone: 0131 242 6533

Email: [med-ssc.support@ed.ac.uk](mailto:med-ssc.support@ed.ac.uk)

SSC2a Course Organiser

Dr Chris Harlow

Email: [c.harlow@ed.ac.uk](mailto:c.harlow@ed.ac.uk)

SSC2b Course Organiser

Dr Rory Mayes

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### SSC2a on EEMeC

<https://www.eemec.med.ed.ac.uk/curriculum/modules/student-selected-component-2a>

### SSC2b on EEMeC

<https://www.eemec.med.ed.ac.uk/curriculum/modules/student-selected-component-2b>

## Introduction

In Year 2 of the Edinburgh medical curriculum there are two Student Selected Components (SSCs) proposed in response to *Tomorrow's Doctors* (GMC, 1993). A major intention of *Tomorrow's Doctors* is to reduce the factual burden of medical undergraduate education.

The aims of undergraduate education are:

- to provide students with adequate knowledge and skills to permit them to function as pre-registration doctors, and;
- to provide them with the skills, interest and attitudes to enable and encourage them to add to this knowledge throughout their life.

Thus 'core' material should occupy not more than about two thirds of the curriculum, while the rest (including electives) should give students the opportunity to go into subjects in depth, and to develop self-driven study skills and habits.

## Learning Outcomes

- To show an enquiring and critical approach to the detailed evaluation of published research in an area of medical science.
- To prepare and deliver to your group a short presentation based on a paper relevant to your project.
- To become familiar with literature searching techniques, and basic critical appraisal of primary medical scientific literature.
- To develop self-directed learning skills under the guidance of a tutor.
- To develop team working skills with which to effectively select and assign aspects of the work.
- To produce a cohesive website.
- To develop the capacity for self-audit and peer-feedback

## SSC2a Key Dates

Project Dates	22 <sup>nd</sup> September to 5 <sup>th</sup> December 2014
First Group Meeting	Week beginning 22 <sup>nd</sup> September 2014
Ethical Assessment Form Deadline	4pm 3 <sup>rd</sup> October 2014
Halfway Group Feedback	9am 17 <sup>th</sup> October to 4pm 24 <sup>th</sup> October 2014
Peer Feedback	9am 24 <sup>th</sup> November to 9am 5 <sup>th</sup> December 2014
Website Submission Deadline (Including upload to individual Portfolio)	4pm 1 <sup>st</sup> December 2014

The first part of the Year 2 Student Selected Component is the SSC2a. This is designed to give you an introduction to group research of a medical scientific topic chosen from a list of projects proposed by tutors. You will then apply the skills developed and the feedback received during SSC2a to research a topic of your own choice in SSC2b.

### Introductory sessions

Introductory sessions will be provided at the start of Semester 1 to provide basic information on SSC2 (both SSC2a and SSC2b), and to introduce you to literature searching, literature access, and critical appraisal techniques.

- **Introduction to SSC2: Tuesday 16<sup>th</sup> September 2014, 2pm – 3pm, Lecture Theatre A, Chancellors Building**
- **Introduction to Critical Appraisal & Literature Searching for SSC2:**
  - Group C (in 3 rotating groups): 10am – 1pm, Thursday 18<sup>th</sup> September 2014, (*Critical Appraisal* sessions in Room 1.9 Doorway 6, 1st floor, Teviot and *Literature Searching* in Greenfield Suite)
  - Group D (in 3 rotating groups): 10 am – 1 pm, Friday 19<sup>th</sup> September 2014, (*Critical Appraisal* sessions in Room 1.9 Doorway 6, 1st floor, Teviot and *Literature Searching* in Greenfield Suite)

In addition to this, SSC2a runs in parallel with Epistats over Year 2 Semester 1. This is a key component of your training in critical appraisal of published literature, a core skill to be developed in SSC2.

- **EpiStats Introductory Lecture: Monday 15<sup>th</sup> September 4pm – 5pm  
Lecture Theatre A, Chancellors Building**
- This will include handouts to help you get started with tackling the statistical elements of the papers you will be critically appraising for SSC2a.
- The Epidemiology and Statistics Study Guide workbook contains both lecture overviews and practical sessions. The practicals give information on topics such as summary statistics, confidence intervals, clinical trials, p-values, prognostic modelling and critical appraisal.
- For further reading on statistical topics the Statistical Notes series on the British Medical Journal website is recommended:  
<http://www.bmj.com/specialties/statistics-notes>

The skills learned in Epistats and SSC2a will prime you for SSC2b.

# SSC2a: Project

## Selecting an SSC2a project

10<sup>th</sup> September 2014:

- 09:00 - Available projects can be viewed and ranked on the course pages in EEMeC <https://www.eemec.med.ed.ac.uk/year2/ssc/>
- You will be notified by e-mail when the project chooser is open.
- Rank your top 10 project choices in order of preference.
- You can return to the chooser site and alter your rankings at any time before the system closes.

18<sup>th</sup> September 2014:

09:00 - Project chooser system closes

- You will be allocated a project based on your rankings and those of your colleagues according to an automated algorithm which aims to give everybody as high a ranked choice as possible.
- Some topics always prove immensely popular and unfortunately it is not always possible for everybody to get one of their most highly ranked choices.
- Groups of 7 - 9 students will be allocated to each project topic.
- It is not possible to arrange swaps between the groups.
- Your grouping (C or D) will affect which topics you can select from, as meetings are scheduled for specific times. If this timetabling prevents you from working on a topic which you wanted to choose, remember that opportunity for a particular interest may be afforded in SSC2b.
- Group allocations will be posted via EEMeC noticeboard entry shortly after the project chooser system has closed.
- Students who have not ranked projects by closure of the chooser system will automatically be allocated to a project

## Group Working

### Meeting frequency

- SSC2 projects have little or no formal teaching, but require students to show enthusiasm and initiative to get the best out of the project.
- Groups should meet one or two times a week, and meet with their tutor at least every second week.
- Some meetings may be best in smaller groups with specific project elements to focus upon.

### Attendance

- Students are expected to make every effort to attend all group meetings, particularly meetings with tutors, and must inform tutors in advance if they cannot attend.
- Tutors will monitor attendance. Unexplained absence from meetings is considered to be unprofessional behaviour, and will be recorded.
- You must not arrange meetings which conflict with other compulsory parts of the course, like PBL or ICP sessions. Similarly, website work or any resultant presentation of posters or attendance at conferences must not conflict with compulsory coursework. If there are any problems arising from this, the [course organisers](#) should be informed at the earliest opportunity.

### Tutors

- The tutor should be a guide, not a teacher.
- Tutors will guide students towards background literature and other sources, keep tabs on progress, and provide guidance if things risk going off track or become too broad.
- Tutors may be any grade, and non-medical or medical.
- Tutors need not be expert in the topic, the only requirement is that they should be knowledgeable enough to provide general guidance and be interested in the subject.
- Tutors will be asked to provide a mark for their own group's project at the end (to contribute to overall marking), and to grade and comment on the performance of their students.

### Group working

- Tasks should be allocated fairly, striking a balance between utilising any obvious talents that group members may have (e.g. artistic, statistics, computing) and broadening the experience of those who need more experience of such things. However, a strong and clearly identifiable academic contribution from each member of the group is essential.
- A contributions page on the website will be required, indicating each member's contributions.



- At the end of each meeting it should be clear what the tasks are for completion by the date of the next meeting, and whose responsibility they are.
- By the end, everyone should understand the full scope of the project, even if some areas have been researched in depth by only one or two individuals.
- Effort should be made to gently bring out the shy and to encourage the more exuberant and dominant personalities to allow space for the contributions of others.
- Any problems with the running of the group, or individual students, should initially be discussed with the tutor. Intractable or serious matters should be taken to the [Course Organiser](#).

## Project

### Aims and Objectives

- **The objective of SSC2a is to critically appraise existing research literature, not to collect more data. This is clearly reflected in the marking scheme.**
- **Conducting your own research should not be a component of SSC2a, but can be considered, placed in the context of the relevant literature, in SSC2b.**
- The project should set out specific aims and objectives to address through researching published literature available on a particular medical / scientific topic.
- The project aims and objectives can be modified from those originally proposed by the tutor. SSC2 is designed to be student led, and only supported by the tutors, so although the initial idea comes from the tutor, it is ultimately the responsibility of the group to develop it in a way that will achieve the aims of the course and score well in the marking system set out in the Study Guide.
- The topic must be one where adequate primary medical or scientific literature (original studies, not just review articles) is available, not just non-peer reviewed popular, non-scientific literature.
- The aims and objectives should be challenging, analysing a specific topic in depth, but realistic for a 10 week project.
- Aims and objectives will be stated on the website, and marked according to clarity, ambition and success with which they have been met.

### Finding Information

- SSC2 is an ideal opportunity to practise and develop the literature searching techniques which were introduced to you in Year 1. This is a core skill of the Evidence-Based Medicine vertical theme.
- One of the introductory sessions will be a practical session on how to use an electronic database to carry out effective searches (18<sup>th</sup> and 19<sup>th</sup> of September: see [SSC2a Key Dates](#))
- There will be additional help material available on EEMeC but some basic advice is given below.
- The following 4 steps are essential:
  - Recognise information need
  - Distinguish ways of addressing the information need
  - Construct strategies for locating the information
  - Locate and access the information
- A description of your approach to finding information, addressing the four steps above, must be included on the website and will contribute to your final website score.

- The majority of your information must be peer reviewed primary medical or scientific research papers and review articles.
- However, any source of information is permitted as long as it is appropriately acknowledged in your report. Where appropriate a component of this could include visits and talking to experts.
- Use web sources wisely. Relying on Wikipedia, Answers.com or similar sites is generally not acceptable. Use original sources or formally peer-reviewed sites.

Using a database such as Medline:

- The best way to find research articles published in academic journals is to use a bibliographic database such as Medline which you can search via the Ovid interface <http://www.ed.ac.uk/is/medicine> or via Pubmed [www.pubmed.gov](http://www.pubmed.gov). If your topic is cross disciplinary you may want to try Web of Knowledge which searches across arts and humanities, science and social science. This is also available at <http://www.ed.ac.uk/is/medicine>.
- You will need an EASE password both on and off campus.
- On EEMeC you will find useful information on how to search medical databases such as Medline. Links to these help guides will be posted on the Year notice board at the start of semester.

Finding full text journal articles:

- Bibliographic databases usually provide an abstract of the article, and finding the full text can sometimes be frustrating and time consuming, but once you have the relevant passwords you will be able to access subscription only resources that are only available to students and staff and are not freely available on the internet.
- Look up the journal title (not the article title) on the Library catalogue at <http://www.ed.ac.uk/is/catalogue> and limit your search to journals. If the Library subscribes to the journal you will then see a list of results which details the location of the paper copies and if the journal is available electronically. To access the electronic version you may need your EASE password. You will then be able to search the journal for the volume and issue that you require. Most e-journals only start from 1997 onwards.
- If the University Library does not have the journal the next place to try is the NHS Knowledge Network (formerly known as the NHS e-Library). You will need a separate password (it is an NHS Athens password) to access this set of resources but it is worth it! You can get one by filling in an online form at [www.knowledge.scot.nhs.uk](http://www.knowledge.scot.nhs.uk). Once you have a password, click on the Journals link and type in the search box the journal title. If the NHS Knowledge Network subscribes to the journal, you will be given a link to the full text. If you are given several links to the same journal make sure that the provider that you select gives access to the date that you require.

- If you can't find the full text of the journal you can submit a document delivery request via the online ordering system Illiad: <https://ed-ac.illiad.oclc.org/illiad/logon.html>. You will need your library barcode for a first time registration. It is best to use the Royal or the WGH Library as your home site as those libraries are able to check your requests. You are permitted 5 free requests. It is usually a quick service and often articles are sent electronically to your email address.
- *Help on Reading and Citing References:*  
<https://www.eemec.med.ed.ac.uk/node.asp?ID=vtebli12>.
- *Online tool which gives guidance on how to reference:*  
<http://www.citethemrightonline.com/>

### Critical Appraisal

- Critical appraisal of primary medical or scientific research papers is an essential component of SSC2a.
- Students may find this task daunting. It is likely to be the first time many students have attempted to read medical research papers. Medical research can be difficult to understand. It is expected that the groups will require help from tutors, health professionals and other students. It is important that all help is acknowledged in the report.
- There will be an introductory session on how to appraise medical research at the start of SSC2a (18<sup>th</sup> and 19<sup>th</sup> of September: see [SSC2a Key Dates](#)).
- In addition, the EpiStats course which runs in parallel to SSC2 in year 2 is an invaluable source of training and support for critical appraisal and statistics for the SSC2 projects.
- Each student must attempt to formally critically appraise primary research papers.
- Each student is expected to make at least one short semi-formal presentation of a critical appraisal of a relevant primary research paper (not a review) at a group meeting, ideally with the tutor present. This should be integrated into the discussions for that meeting.
- Clear evidence of personal evaluation of the literature is required throughout the website. Although reviews can be used to give general context, you won't get high marks if the website consists of simply re-phrasing things that you could have got from reviews.
- **The group must complete one formal critical appraisal of a research paper (not a review) that is important to the project topic, and upload it as an appendix to the website for formal assessment.**

- The formal group critical appraisal appendix is assessed independently from the website, but must receive a pass mark to pass SSC2.
- Websites should show evidence of a systematic approach to critical appraisal and use of the correct jargon (see [Appendix 1](#)).

# SSC2a: Assessment

See also see [SSC2a Key Dates](#)

## Extensions

Students are expected to take responsibility for their SSC projects and plan their time accordingly to ensure they meet the requirements of the course. However, occasionally, circumstances outside a student's control may have an impact upon their work and their ability to submit their assignments in time. In such circumstances, it may be appropriate for a short extension to be granted. For further information, see [Further Assessment Information](#).

## Penalties

There is a single penalty system across all Student Selected Component assignments for all work submitted late. For further information, see [Further Assessment Information](#).

## Word Counts

When assignments are designed, there is thought given to the appropriate word limit. As a result, if you do not adhere to the word limit then you are not satisfying the given assignment brief. For further information, see [Further Assessment Information](#).

## Plagiarism and Academic Misconduct

Academic misconduct, of which plagiarism is an example, is taken very seriously by the University of Edinburgh. Penalties include mark reductions and being referred to the University Student Discipline Committee. For further information, see [Further Assessment Information](#).

## Results

All key assessment dates, including the dates upon which marks are released, are published on the *Semester and Assessment Dates* webpage on the Assessment pages on EEMeC:

<https://www.eemec.med.ed.ac.uk/pages/resourcessidebar/semester-dates-and-assessment-calendar>.

Dates may change throughout the year, so check this file before querying when you will receive your results. A notice will be posted on the EEMeC Discussion Boards notifying students when results have been released. If the results have been released and you are having problems accessing them, please contact the SSC Secretary.

### **Final Group website mark**

SSC2 is fundamentally group work, and the results will be dependent on your abilities to work together coherently and effectively. This is analogous to clinical practice, where a good outcome for an individual is dependent on good teamwork.

**The final mark for the website is therefore applied to all members of the group.**

Websites will be marked by your tutor, and another examiner using the criteria below.

- The pass mark is 60%. A pass mark in each element of the SSC2 is required to proceed into Year 3. This includes peer feedback. Measures to be taken in the event of a fail mark being awarded will be decided by the examiners, but might for instance require a pass mark to be achieved for revision of the website, or an extended written assignment requiring a similar degree of depth to that demanded for Small Group projects. Closer supervision of subsequent SSCs (including electives) could be an additional or alternative requirement.
- Marking is reviewed by external examiners, and final marks are decided and approved at an examiners meeting. It is possible that external examiners may want to quiz some groups about their projects for the purposes of quality control for the course. You can find a list of External Examiners for the MBChB programme on eemec:  
<https://www.eemec.med.ed.ac.uk/pages/index/external-examiners>.
- See [Further Assessment Information](#) for information relating to plagiarism, word counts and penalties.
- The output from both SSC2a and SSC2b will form a part of your portfolio.

### **Group critical appraisal mark**

- The formal group critical appraisal appendix in SSC2a is assessed independently from the website, but must receive a pass mark to pass SSC2. The marking system will be a simple pass or fail, but each group will also receive individual feedback on the quality of their critical appraisal and advice and comments.
- If a critical appraisal appendix is marked as a 'fail' the group may resubmit the critical appraisal after a feedback discussion with the marker. If the resubmitted critical appraisal passes then the critical appraisal is marked as a resit 'pass'.

### **Appealing a mark**

- Students who wish to appeal a mark on grounds such as 'lack of due process' are advised to refer to the section on 'appeals against a mark for in-course work' in the Years 1 and 2 Study Guide on Assessment.

## Producing the Website

### General

- The primary output will be a group report, presented as a website on a University server.
- **The website must be completed and the URL uploaded to your individual portfolios by 4pm on Monday 1<sup>st</sup> December 2014.**
- Late completion or uploading will be penalised. See [Further Assessment Information](#).
- It is the individual student's responsibility to verify that upload has been successful.
- Course Organisers reserve the right to take examples from websites to use as exemplars for future years.

### Creating a website

- Information relating to creating a WordPress website can be accessed online via the sample SSC2 website:  
<http://studentblogs.med.ed.ac.uk/samplessc2site/>.
- Tutors are not expected to know how to create or format a website.
- It's a good idea to create a basic website early and gradually fill it in and edit it

### Word limit

- Your website must be **no longer than 6,000 words** (excluding the Contributions appendix, References appendix, Critical Appraisal appendix, Information Search Report, Word Version appendix and any other optional Appendices).
- Adhering to this word limit should encourage you to present a concise, focused and well written website. This is an important skill to learn, and the website will be easier to read.
- You must name each page, so that it is identified by name on the website word counter, and clearly name Appendices as Appendix 1, Appendix 2 etc.
- You must indicate the word count, on the front page of the website, as below:
  - Total Website Word count: \_\_\_\_
  - Word count minus Contributions page, References page, Critical Appraisal Appendix, Information Search Report, Word Version appendix and other sections clearly marked as Appendices: \_\_\_\_
- All references should be listed only in the reference page appendix. Any in the main body of the website will be included in the word count.
- HTML will contribute towards the total word limit. The point is to maximise valuable content, not to spend time making a clever website.
- Text must not be 'hidden' e.g. embedded in figures and tables. Hidden text will be added to the website word counter by the examiners in considering penalties.



## Website format

- The website must have a homepage with clear aims and objectives, an Information Search Report appendix, a main body with a strong conclusions section, a References appendix, a Critical Appraisal appendix, a Contributions page appendix, and a Word Version appendix.
- The main body of the website can be structured in any way you wish.
- You should add logical links and use the top-bar menu system to achieve effective navigation (note words used in navigation will be counted in your word count).

## Homepage

The main homepage should act as both a short introduction and the navigation guide to your site. Make sure that this first page very clearly contains the following:

- Clearly stated, specific, justified aims & objectives for your project.
- The statement below must be added. By including this, you (the authors) formally certify that this is your own work and that all required permissions have been granted with respect to copyright:
  - “This site was made by a group [link to the Contributions page listing all of you] of University of Edinburgh medical students who studied this subject over 10 weeks as part of the SSC [link to the SSC web pages].
  - This website has not been peer reviewed.
  - We certify that this website is our own work and that we have authorisation to use all the content (e.g. figures / images) used in this website”
- Don't forget to credit your tutor here.
- A word count for the whole website ([as specified above](#)).

## Information Search Report Appendix

Provide a short section detailing the approach the group adopted to the literature search and other routes of finding information. This should be no more than 300 words.

The following four steps should be addressed:

- **Recognising the information gap.** For this section you need to describe how you got an overview of the topic and which resources you used to scope the literature. Starting to research a particular subject area can be daunting but you will begin to recognise the areas that you need to know more about. You could ask your tutor if they have a good review article in the topic and you could then follow up the references. At this stage your searching should be broad and wide ranging. It is helpful to keep notes of your searches.
- **Distinguishing ways of addressing the information gap.** When you have an overview of the subject area and a working knowledge of the type of information that you need to gather you can start thinking about how to get

this information. Describe what resources you searched, and why, and whether they are primary or secondary sources.

- **Constructing strategies for locating the information.** Now you should have a more systematic approach to the searching process. You should describe the keywords and subject headings that you use in your database search (this will be covered in the tutorial). How did you use Boolean operators to combine your search terms? How did you use limits to narrow your searching? At this stage your search strategy should be focused and your results fewer, but more relevant. If using a database such as Medline it would be helpful to include a copy of your search strategy.
- **Locating and accessing the information.** In this section describe the process of finding the full text of journal articles. Record any problems that you encountered that prevented you reading full texts, and how you got around those problems.

Describe the types of evidence available and used for your topic of choice: clinical trials, basic science, animal experimentation, observational studies, questionnaires, case reports, expert opinion, reviews. A helpful glossary of evidence based medicine terms can be found at <http://www.cebm.net/?o=1116>.

### **Main report**

- Provide a clear introductory section explaining the importance of the topic, and with sufficient basic background information to make the rest of the report accessible to the uninformed reader.
- The main body of the website should provide the detailed report on your specific topic, specifically addressing your aims and objectives.
- A well-considered, evidence-based report, with a number of clear arguments developed in depth, will score more highly than a broader, mostly descriptive, review-type website.
- So: go for **depth** rather than **breadth**.
- Don't just write everything you know about a topic, but focus it on specific questions, with a clear and logical progression of related ideas and arguments, towards strong final conclusions and thoughts that address the original aims, show you've read in depth and really considered the implications.
- The report should not simply list facts, but should analyse and synthesise what you have learned. Any contradictions and problems should be described and discussed, not hidden.
- Clear evidence of personal evaluation of the literature is required throughout the website. Although reviews can be used to give general context, you won't get high marks if the website consists of simply rephrasing things that you could have got from reviews.

- Integrate and clearly discuss your formal group critical appraisal paper (and all the other papers than you have personally appraised) into the development of ideas and arguments in a manner that shows you have really thought about it, not just copied somebody else’s review.
- Aim to produce a cohesive, consistent final website.
- Assume the audience is no more knowledgeable than you were before you started the project.

**Exemplars:**

*“Many studies suggest that green tea helps prevent cancer and this is widely accepted by many people.”*

**Very poor:** This is vague, non-specific, unreferenced, and does not give any indication that the author has actually read any primary scientific literature in this area.

*“Garlic is known to exhibit anti-thrombolytic activity. Mechanisms include an inhibition of membrane phospholipase activity; an inhibition of thromboxane synthesis by an inhibition of cyclooxygenase and lipoxygenase; inhibition of calcium uptake into platelets; and inhibition of platelet aggregation.<sup>[52],[53],[54]</sup> In vitro, garlic has been shown to open K<sup>+</sup> channels, reduce Ca<sup>+</sup> and cause vasodilation. It also inhibits ACE, induces NOS activation and reduces the inhibitory effect of L-NAME on NO production.<sup>[55],[56],[57]</sup>”*

**Superficial.** This is too much of an overview list. There is a place for this kind of information in the website in establishing background as long as the website then goes on to more in depth discussion of specific aspects of the research. But have the authors really read all those references? There is no evidence that they have, and this statement (and all the references) may have just been lifted directly from a review (see [Further Assessment Information](#)). They should not be referenced unless they have been read. It is appropriate to simply reference one review (“As reviewed in REF”) that the author has read in which this summary is described and in which the original references can be found. If all these references have been read, then reflect this clearly in the way it is written.

*“The association between gestational diabetes and maternal obesity has been supported in several papers, the most prominent being the study by Sebire et al.<sup>[16]</sup> which concluded that obese women were 3.6 times more likely to develop gestational diabetes than those with a normal BMI. The sample size for this study was large (over a quarter of a million subjects) which reduced the likelihood of*

*chance bearing a factor in the results. The possibility of bias when collecting the data was eradicated from this study by using data already collected previously for a different cause. However, there were flaws in this study specifically the small region from which all of the data was taken from and the lack of information disclosed about how potential confounding factors were accounted for.”*

**Excellent.** The authors have clearly read this paper and given personal consideration to its merits and relevance. You can't do this for every paper you reference. Some references will simply be used to reference a simple fact in introducing a topic. However, as much as possible the text should demonstrate that you have read and appraised the studies you reference, and then clearly integrated the facts into the development of your ideas and arguments.

### **Conclusions**

- Providing strong conclusions in your report is absolutely vital. It is disappointing to read through good material and then to find that it hasn't been drawn together well, or no conclusions made.
- Short 'take-home message' summaries and individual section conclusions are an effective way to reiterate key findings and demonstrate a well-considered understanding of a topic.
- A good final conclusions page can make all the difference. Do not leave this too late and end up rushing the preparation of this at the end of the module.
- Your conclusions pages should summarise the key findings, consider application and implications of these, discuss weaknesses, and develop ideas for future research needs in the area. It should be more than a summary; show a level of personal reflection, be thought provoking and be constructed with reference to addressing the project's aims and objectives.

### **Referencing**

- The References appendix is vitally important as it validates the sources of your information, and allows readers to further investigate specific elements of your work.
- Cite the references within the body of the website and then list references in numerical order on a page at the end of the website using Vancouver style, for more information see the guidance at :  
<https://www.eemec.med.ed.ac.uk/node.asp?ID=vtebli12>
- References should be included only on this page, and not on individual section pages, although it can be split into sections here to reflect different parts of the report.
- **Only sources of information that you have actually read should be referenced.**

- Where a fact comes from a review which refers to another original source for that fact, you must refer to this in the form “as reviewed in...” and reference the review, unless you read the original source too.
- Indicate the information source type in brackets after the reference on the References page (e.g. (Primary research paper), (Review article), (Abstract), (Website)).
- While each individual may not have read all of the references, at least one member of the group must understand their methodology and conclusions if you are quoting them to support your story, and be able to answer questions on the detail of any references given, in the event of being required to present their work to an external examiner.
- Some primary sources are so central that you should all understand them in detail, and all members of the group should have a basic knowledge of all elements of the report.
- Adding very brief comments (i.e. a single short sentence explaining why a paper was valuable, or what its key relevant finding was), or even giving a grade to key references is a powerful way to demonstrate their significance and demonstrate your personal evaluation of the work. However, reading these must not be integral to the primary website presentation.
- In addition to appropriate citation of the source, you may want to provide a link to PubMed or even to the reference itself.

### Exemplar of excellent referencing:

[1] Xanthou, M, Bines, J, Walker, WA, Human milk and intestinal host defense in newborn: an update. *Adv Pediatr*. 1995; 42:171–208.

<http://www.ncbi.nlm.nih.gov/pubmed/8540428> (Primary Research Article)

[2] Paricio Talayero JM, Lizan-Garcia M, Puime AO, Muncharaz MJB, Soto BB, Sanchez-Palomares M, et al. Breastfeeding and Hospitalization as a Result of Infections in the First Year of Life. *Pediatrics*. 2006;118(1):e92-9.

<http://www.ncbi.nlm.nih.gov/pubmed/16818542> (Primary Research Article)

- A huge study with 1385 babies showed that full breastfeeding would lower the risk for hospital admission as a result of infections among infants who are younger than 1 year within an industrialized country.

[3] Uyanik M, Bumin G, Kayihan H. Comparison of different therapy approaches in children with Down syndrome. *Pediatr Int*. 2003; 45(1):68-73. (Abstract- could not access article)

[4] National Deaf Children’s Society. Teenage Information for families, Down’s syndrome and childhood deafness. ©2007. [cited 2011-02-09] Available from :

URL:

<http://www.manchesterentdoctor.co.uk/NDCSDSandChildhooddeafnessFinal.pdf>

(Online leaflet)

[5] Sheehan P. Management of glue ear. Down Syndrome Association Journal. Autumn 2008;118:9-10 (Magazine article)

[6] Buckley SJ. Speech, language and communication for individuals with Down syndrome — An overview. Down Syndrome Issues and Information. 2000. (Information Booklet)

- Provides an excellent background to the normal process in learning to talk, difficulties in DS children and examples of speech and language therapy.

[7] Contestabile A, Benfenati F, Gasparini L. Communication breaks-Down: from neurodevelopment defects to cognitive disabilities in Down syndrome. Prog Neurobiol. 2010; 91(1):1-22. <http://www.ncbi.nlm.nih.gov/pubmed/20097253> (Review Article)

- Gives a detailed description of cognitive abnormalities in DS children and their neuroanatomical correlations.

[8] Crossman AR, Neary D. Neuroanatomy. 4th ed. Edinburgh: Churchill Livingstone Publishers; 2010. (Textbook)

### **Critical Appraisal appendix**

- Each group must upload one concise (no more than 600 words), formal critical appraisal of a research paper (not a review) that is important to the project topic as an appendix to the website. This is a requisite to pass SSC2a.
- This critical appraisal appendix will be formally marked, and will contribute to your personal portfolio, uploaded as part of the website upon completion of the module.
- Details of how to structure this formal critical appraisal will be given in the introductory sessions on critical appraisal (see [SSC2a Key Dates](#)). Guidance on Critical Appraisal can be found in [Appendix 1](#).
- Remember that the markers for your website will not be reading your Group Critical Appraisal appendix, so make sure it is appropriately discussed in the main website too if it is a key reference.

### **Word Version appendix**

- Each group must upload a Word document version of the full text (minus images etc) of the entire website, accessible from the Word Version appendix page.
- To create a Word Version appendix, copy and paste the final website text into a separate Word document and upload to the Word Version appendix page.
- This version must correctly detail the text contained within the website. The document will be used for a plagiarism check, and will also be used to check the word count provided on the website homepage.

### **Other appendices**

- Additional appendices are allowed but will not be considered part of the website for marking purposes (therefore while they can provide additional material for interested readers, they must not be integral to the website).
- There is an option to keep a diary on the WordPress website. This diary will not be marked, and is optional: but students are encouraged to consider keeping a weekly record of their work as this will enable tutors to track progress throughout the SSC2a projects. If the website is later made public, the diary will not be published.

## Images

- When used effectively, figures and pictures enhance a website and contribute to understanding key messages, but too many or too gimmicky a style may detract from the message.
- You **MUST** ensure you have rights to use images before placing them online, and unless you have explicit copyright permission or are clearly keeping within stated rights (e.g. for some Wikipedia images under a GNU Free Documentation License) you should not use the images.
- **Images must be attributed with information on source and copyright (or link to copyright information) on the same page as, and beside the image (not in the references appendix).**
- You may consider preparing your own images/sketches/photos/cartoons to ensure that you do not break copyright legislation, but do note that you hold the copyright beside the image. You don't need to be a great artist to get a point across visually and save on words, and these are often far more effective at illustrating the specific point to be made.
- If you adapt an original image, the original source must be referenced ("Adapted from...").
- Consider carefully how appropriate images are before using them. Remember this website may be seen by members of the public and that images of patients must NOT be used without appropriate written permission.

## Videos

- The use of videos on the website creates unquantifiable additions to website size and is therefore not encouraged.
- Commercially produced or Youtube videos (or similar) must not be used on the website.
- Videos produced by the group may be used, but will be deemed to be additional appendices, must not be integral to understanding the website, and will not be viewed by markers when grading the website.

## Contributions appendix

The contributions appendix is an obligatory page for your website that attributes the contributions made by each member of the group.

The content of this page must be agreed by the whole group, and should be less than 300 words.

Example:

- John Smith conducted the majority of the literature review on opportunistic pathogens, wrote the website pages on cystic fibrosis lung disease and opportunistic pathogens, drew the cartoon illustrations, and provided assistance with the final formatting.
- Jen Paaka wrote and researched the sections on social exclusion and infection, conducted the interviews with the CF Trust, and organised all the references into the correct format.
- Fabian Chenok helped to research the area on genetics, wrote some of the reflections page and attended most of the meetings.
- Sally McNair researched and constructed the website section on gene therapy, co-wrote and researched the page on genetics with Fabian Chenok, was responsible for the statistical analysis, helped to solve everybody's website problems, and performed much of the final editing.
- Andy Currie researched and wrote the website page on non-pulmonary effects on CF, and assisted with reviewing the opportunistic pathogens section, provided most of the images from external sources (and verified copyright permissions), wrote the ethical assessment and co-ordinated most of the meetings.
- Xiao Li researched the 'History of CF' and 'Future directions', wrote those website sections and the front page, organised the contributions page, and designed the summary table.
- Helena Bowen-Parkwell researched the 'Current Therapeutics' and 'Future Directions' sections, wrote the website page on therapeutics and the Group conclusions, constructed the glossary, and helped with final formatting and references.

### **Weekly Diary**

In addition to creating the final, assessed website, you are encouraged to use the blog/post function to create a diary of meetings and group discussions, as well as noting when and what individuals have contributed material to the website. This not only helps you to keep track of what is happening, but also will aid the tutor in assessing your individual performance/contribution. This will not be marked, and the posts will not count towards your word count.

### **After the Project**

At the end of your SSC2a project, the Course Organiser may wish to send your final website live, by way of an exemplar project. If your website is chosen to be made public, the group and your project tutor will be contacted for joint approval regarding this. Any websites made public will not include the weekly diary: this will remain unpublished.



## **Feedback**

A broad selection of sources of feedback will contribute to SSC2, as described below.

Students should use the feedback from SSC2a as “feed-forward” to optimise their performance in their SSC2b projects.

### **Within-course feedback**

- Tutors will provide ongoing verbal feedback throughout the module, through discussion of your research and website.
- Students should maximise their participation through asking and answering questions to gain the most feedback from these sessions.
- Tutors will provide specific oral feedback on individual student’s oral presentations of critical appraisals, where applicable.

### **Website marking feedback**

- Markers will provide written feedback tailored to the various marking categories used for assessing the website, in the form of :
  - What was good?
  - Problems identified
  - How could this have been improved?
- This feedback will be released to the students in January 2015 with the provisional group website marks.

### **Group critical appraisal feedback**

- Markers will provide written feedback on the group critical appraisal.
- This feedback will be released to the students in January 2015 with the provisional group website marks.

### **Halfway group feedback**

- This is a simple-to-complete account of how each group member thinks the group is working collaboratively.

### **Peer feedback**

- Each student will receive peer feedback grades and comments from:
  - themselves
  - all members of their group
  - their tutor
- Students will be able to compare their assessment of themselves for each descriptor with the tutor’s assessment, and with the mean scores for each descriptor from their group.

- Students will be able to compare their peer review scores for each descriptor for PBL and SSC modules, and work to enhance their scores in key areas over time.
- This feedback will be released to the students in December 2014.

Any students who wish to discuss their work in more detail should initially approach their tutor. In circumstances where this is insufficient the course co-ordinator and organiser should be approached.

## Feedback Events

Feedback essentially consists of the following two events:

- A 'half-way' group feedback, and;
- A final peer feedback.

Participation in both feedback events is compulsory, but the number of events has been reduced and the system made more user-friendly to assist you with completion.

### Half-Way Group Feedback

09:00 Friday 17th October 2014: Half-way group feedback opens on EEMeC

16:00 Thursday 24th October 2014: Half-way group feedback closes

- This is a simple-to-complete account of how you think the group is working collaboratively and primarily an opportunity to identify any areas of concern early. It involves entering a brief commentary on EEMeC.
- This should be short and concise.
- The box will begin the commentary for you: "Please comment on how your whole group is performing in achieving its goals: \_\_\_\_\_"
- It might be useful to consider three short questions:
  - when the group is working well consider : "I think it is working well because..."
  - when the group is working less well consider : "I think it is working less well because..."
  - or "on the whole, the group would work better if...[give some suggestions]"
- Please use the same professional approach to answering this question as you are guided to use when leaving Peer Feedback (see below).
- Your answer will be viewable by your group and tutor, but be anonymous.
- The course organiser will be able to identify the source of each comment, but will treat this as confidential information.

### Peer Feedback

- This is a little more demanding of your time, but provides valuable insight for your peers on how their personal performance in a group might be improved. It comprises three components measured against six prescribed criteria:
  - a self-assessment: *how you rate yourself*
  - peer feedback: *how you rate your peers*
  - tutor/facilitator feedback: *how you rate your tutor/facilitator*
- Each individual will receive feedback on their performance in SSC2 from their group and their tutor, and individual contributions to the website are described on the Contributions page.
- Feedback will be given to your Personal Tutor.

- Individual performance in group work across the curriculum may be tracked separately from total marks in order to identify individuals in need of counselling or specific training.
- Failure to satisfactorily complete Peer Feedbacks can result in interview, application of penalties, and review of progression to the next year of the course.
- Where there are significant concerns, an individual's performance may be deemed to be unsatisfactory irrespective of the group's website score and that individual's marks may be adjusted accordingly.
- Interviews with individual students whose performance has given cause for concern may be required, even if they have not achieved an outright fail mark. These may be used to determine the appropriate response to a clear fail mark, or to understand the reasons behind an unexpectedly poor mark or assessment.
- Where it is confirmed that there has been a failure of contribution or team working, the Board of Examiners may downgrade your individual mark by a proportion, or even to 'fail', regardless of other components of the assessment.

### **Peer Feedback Introduction**

- Peer feedback is increasingly used as a tool to improve clinical performance.
- The development of the skills involved in making peer appraisals is transferable to clinical practice and therefore it is important to engage fully with this professional skill.
- The aims of peer feedback in the MBChB are to:
  - give you practice in reflecting and assessing yourself and others
  - reinforce the good aspects of your performance
  - give you constructive critical feedback, identifying areas of performance where you are doing well and those areas where there may be room for improvement
  - develop your skills in using feedback to assist personal development
  - prepare you for professional practice
- This feedback is a formal process, forms part of your permanent record, and may be reviewed and made available to the Board of Examiners. Failure to satisfactorily engage with peer feedbacks can result in the application of penalties and affect progression to the next year of the course.
- Peer feedback from SSC2a should be used at 'feed-forward' and used to try and enhance your individual performance in SSC2b.

### **The peer feedback system:**

- allows you to give peer feedback grades in each of six different criteria:
  - preparation for the session
  - participation during sessions

- group working skills
- communication skills
- professional behaviour
- critical thinking
- automatically creates an overall grade and collects specific comments raised by peers.
- is applied across both PBL and SSC, allowing you to track progress in your performance for each indicator.
- allows you to insert comments and grades, and then go back and amend them at any time during the period of your group work. You should try to add comments well before the deadline, and then adapt them as required.
- requires you to save the changes after you make them, and finally submit them.

### **What happens to the peer feedback?**

- It provides detailed output, including composite grades from the members of your group for each category, which you can compare to the assessment you made of yourself, and that from your tutor/facilitator.
- It automatically generates a report for your Personal Tutor.
- It enables you to upload reports to your Portfolio.

### **Will the tutors/facilitators be using this system?**

- Yes. Your tutor/facilitator will be engaging in exactly the same process.
- Tutors/facilitators will also be looking at the commentaries posted from each student in your group, before anonymised feedback is authorised for release.
- Peer feedback raised by students about their tutors/facilitators is anonymised before release to tutors/facilitators.

### **Peer Feedback Instructions**

*SSC2a Peer Feedback opens: 09:00 : Monday 24th November 2014*

*SSC2a Peer Feedback closes: 09:00: Friday 5th December 2014*

- It is compulsory to perform peer feedback at the end of SSC2a and in SSC2b
- You will be able to gain access to the peer feedback via a link on EEMeC. This link will become available at the appropriate time.

### **How do I go about leaving feedback for my peers?**

- Using the grade descriptors below, grade yourself (A-F), and each of your peers in this group, for performance in each of the six criteria, over the whole semester. The process will automatically generate an overall or composite grade for peers, as well as a numerical mark

#### **Grade descriptors:**

A = 90-100% EXCELLENT

B = 80-89% VERY GOOD

C = 70-79% GOOD  
D = 60-69% PASS  
E = 50-59% MARGINAL FAIL  
F = 0-49% CLEAR FAIL

- Add helpful comments on key elements of performance for each of the criteria. You will not be able to submit without adding comments. Helpful comments may include emphasising the most important good and not-so-good points. Remember this brief commentary is meant to help with improvement of performance over time. (See sample comments in [Appendix 5.](#))
- Be honest, factual and brief.
- If necessary, be critical, but try to be positive.
- Make comments in a way that will allow the recipient to use them to shape new approaches to situations.
- Think about how the feedback will come across to your peer. Try perhaps to balance a positive point with a more negative one. Remember that no matter how good the performance, there is still room for improvement.
- Adopt a professional approach, do not be frivolous, and use appropriate language.
- This feedback is a formal process, forms part of your permanent record, and may be reviewed and made available to the Board of Examiners.
- Failure to satisfactorily complete peer feedback can result in interview and review of progression to the next year of the course.
- Please provide anonymised feedback comments for your tutor/facilitator using the same approach (although you may not necessarily decide to use all the reference criteria detailed above).

#### **Do I need to save my changes?**

- Yes. After completion or modification of peer feedback make sure you save it.
- You can edit the grades and comments any time prior to the closing date for a particular peer feedback event, or until you submit it by pressing the submit button.

#### **How do I submit my peer feedback?**

- The peer feedback system will be open for a defined period towards the end of the semester.
- You must complete the feedback and **must actively submit it before the system closes.**
- You cannot submit the feedback until all sections are completed.
- Peer feedback that is not submitted is not used, and will be penalised as 'failure to complete'.

- You will receive an automated e-mail sent to your SMS account to confirm submission, with a time and date stamp. If you have not received this e-mail you must assume that your peer feedback is not submitted.
- If you do not receive the email upon submission, or need help, please contact [eemec@ed.ac.uk](mailto:eemec@ed.ac.uk), before the submission deadline.

See also [Appendix 5](#).

## **Further Assessment Information**

### **Extensions**

Students are expected to take responsibility for their SSC projects and plan their time accordingly to ensure they meet the requirements of the course. However, occasionally, circumstances outside a student's control may have an impact upon their work and their ability to submit their assignments in time. In such circumstances, it may be appropriate for a short extension to be granted.

If circumstances beyond your control have affected your SSC work and you require a short extension, please contact the SSC Secretary in writing. You must include details of why you require the extension and how long you require. You must also confirm that your supervisor or tutor supports your extension.

In exceptional circumstances, it is possible for an extension longer than two weeks to be granted. If you require an extension longer than two weeks, contact the SSC Secretary in writing as above.

Please do not rely on an extension being granted until you have received written confirmation from the SSC Secretary. If you have submitted an extension request but have not yet heard back, you are advised to continue to work to your original deadline until you hear otherwise.

### **Penalties**

There is a single penalty system across all Student Selected Component assignments for all work submitted late, in line with the standard University penalty system outlined in the Taught Assessment Regulations. For each day your assignment is late you will receive a mark penalty per day (or part thereof) of five marks on the 0-100 marking scale: please be aware that this includes all calendar days, including Saturdays and Sundays. After five days, you will receive a mark of zero.

Any student who does not believe they will make the deadline due to circumstances beyond their control should submit an extension request in good time.

### **Word Counts**

When assignments are designed, there is thought given to the appropriate word limit. As a result, if you do not adhere to the word limit then you are not satisfying the given assignment brief.

You must declare the word count of your project clearly on the front page of any assignment. Please check you read the Study Guide carefully so you are aware what must and what should not be included in your word count.



The Portfolio Committee is to agree the processes for how to consider assignments when the word limit has been exceeded, including consideration of any penalties. Once this has been agreed, this information will be published on EEMeC.

It is therefore advisable that you ensure you check your word count very carefully and make sure it is correctly detailed on your project.

### **Plagiarism and Academic Offences**

Academic misconduct, of which plagiarism is an example, is taken very seriously by the University of Edinburgh. Possible penalties include mark reductions and being referred to the University Student Discipline Committee.

Information relating to academic misconduct, including information regarding how to avoid plagiarism in assignments and the use of plagiarism detection software, can be found on the Academic Services webpages:

<http://www.ed.ac.uk/schools-departments/academic-services/students/undergraduate/discipline/academic-misconduct>

These pages also house the formal procedure for academic misconduct cases.

## SSC2b: Project

This section of the Study Guide must be read in conjunction with the information for SSC2a projects. The sections on Group Working, Producing the Website, Peer Feedback, and Ethical Assessment apply equally to SSC2b.

Evidence of undertaking critical appraisal is less crucial for SSC2b and the sections about critical appraisal do not apply. **Though critical appraisal is an important part of the project, it should form an integral part of the website: a separate critical appraisal appendix is not required.**

The limit for the website is 6000 words. The total word count (excluding contributions, references and appendix pages) must be stated on the front page of the website.

A brief information search report (similar to SSC2a) is required for all websites. A Word document version of the full text (minus images etc) of the entire website accessible from the 'Word Version Appendix' must also be produced and submitted. This will be used to check for [plagiarism](#).

If possible, groups should be made up of students from the same year group (i.e. all Group C or all Group D) to facilitate meetings around the Year 2 timetable.

### SSC2b Key Dates

Project Dates	12 <sup>th</sup> January to 20 <sup>th</sup> March 2014
Project Proposal Deadline	5pm 27 <sup>th</sup> November 2014
First Group Meeting	Week beginning 12 <sup>th</sup> January 2014
Ethical Assessment Deadline	30 <sup>th</sup> January 2015
Halfway Group Feedback	9am 6 <sup>th</sup> February to 12noon 13 <sup>th</sup> February 2014
Peer Feedback	9am 9 <sup>th</sup> March to 5pm 20 <sup>th</sup> March 2014
Website Submission Deadline (Including upload to individual Portfolio)	12noon 20 <sup>th</sup> March 2014

In SSC2b there is scope for arranging your own small groups – both according to subject matter and composition of the group. You are encouraged to be as creative as possible about this. Among the many possibilities is that of covering an entirely non-medical and non-scientific topic. Topics studied have included Music (Composition), History, English Literature, Medical Illustration, Philosophy, Robotic Modelling. This is probably your last chance to do such an off-beat thing during your student years. However, not everyone will want to be as different as this, and studying medical or other scientific topics that you would otherwise not get the opportunity to do is an excellent way to use the time.

### **Organising your group**

- Group size should be five to eight students for maximum effectiveness. Larger groups than this will not be allowed. Smaller groups are not practicable. Remember there will be opportunities to do individual SSCs in Year 4.

### **Approaching a potential tutor**

- One or two students representing an interested group should approach potential tutors, to prevent people being bombarded by multiple enquiries. The same applies to contact with the Course Organiser, please!
- At the outset, show potential tutors the letter shown below (please do not use versions from earlier years), and direct them to websites of last year's groups: <http://www.portfolio.mvm.ed.ac.uk/studentwebs/session.asp?s=13>
- If approaching people by email, explain your interests, give them the text of the letter, and direct them to the course web pages. Check that links you send work in the way that you have written them before sending.
- Please do not approach potential tutors before the beginning of SSC2a, so that you are sure you have a real idea of what SSC2 projects are all about.

### **Letter for prospective tutors**

A sample letter is shown in [Appendix 6](#). It is also available from EEMeC. Download it, or copy the text to email it, giving potential tutors the URL of the website.

### **Approving your project**

- All proposed projects and groups must be approved in advance by the [Course Organiser](#).
- There must be a substantial 'academic element' to what you are doing. For example you might be able to justify a course that included wine tasting if there was a study of the agriculture, chemistry, olfaction, microbiology, or genetics (scope for genetic manipulation?) of wine production behind it. If in doubt, discuss with the [Course Organiser](#).

- The ‘lead student’ should send a short paragraph outlining title and content, with the contact details of the person who has agreed to be tutor, and a list of proposed group members, to the [SSC Secretary](#) for approval.
- Your fleshed out proposals must have been submitted for approval by **5 pm 27<sup>th</sup> November 2014**. You will be informed shortly afterwards if these have been approved. If you have fewer than five group members it may be possible to fill one or two vacancies by offering the subject to the class as a whole at the end.

### Project output

- Groups should usually aim to run broadly according to the Small Group format as outlined in the SSC2a study guide. It is rarely possible for other Faculties to lay on much formal teaching or practical work for small groups of students. Most of the project has to be self-driven.
- The group should usually produce a website along the lines of that detailed for SSC2a. Alternatives (or additional elements) may be possible if the topic doesn’t easily fit that – discuss with the [Course Organiser](#) if you think that will be the case (see below, [Why Should We Produce A Website?](#)).
- The front page of the website must include the total word count and the following statements:
 

*“This site was made by a group [link to the Contributions page listing all of you] of University of Edinburgh medical students who studied this subject over 10 weeks as part of the SSC [link to the SSC web pages]. This website has not been peer reviewed. We certify that this website is our own work and that we have authorisation to use all the content (e.g. figures / images) used in this website”*
- By including this, you (the authors) formally certify that this is your own work and that all required permissions have been granted with respect to copyright
- As in SSC2a, use of commercially produced You Tube or similar videos are not allowed.
- Each group must complete and submit an [Ethical Assessment Form](#).
- As in SSC2a all students **must** complete a half-way group feedback and final peer feedback. Penalties for late or non-submission are the same as for SSC2a.

### Questionnaires and obtaining your own data

- If you do think a questionnaire component will add significantly to your study, bear in mind:
  - that there are serious problems with questionnaire overload to some groups.
  - that questionnaire design is a science in itself (see the *Statistics Resources and Questionnaire Design* section for online advice, in the

vertical themes at:

<https://www.eemec.med.ed.ac.uk/node.asp?ID=vtst0000>).

- you should think well ahead and pilot your questionnaire.
- Anyone wishing to conduct a survey of University of Edinburgh students must have permission from the students' Head of School, College Office or the Student Survey Ethics Committee, depending on the extent of the survey.
- The University has a Student Survey Ethics Committee (SSEC) that is remitted to assess requests for access to the University's student body from external organisations, individuals and internal members of the University wishing to undertake a University-wide survey\* or a survey which extends beyond one College.
- For surveys to be conducted within a single School, permission is required from the Head of School and for surveys to be conducted within a College, permission is required from the College Office and the SSEC is not involved.
- To avoid over-loading the student body, no student, regardless of their home institution, will be granted permission to conduct University-wide surveys or surveys which extend beyond one College for the purposes of dissertation or assignment research.
- For further information about the Student Survey Ethics Committee, please refer to the website: [www.ed.ac.uk/schools-departments/academic-services/committees/student-survey-ethics](http://www.ed.ac.uk/schools-departments/academic-services/committees/student-survey-ethics).

\*Please note that 'survey' refers to any questionnaire or other sampling mechanism used to collect facts, figures, or opinions. This does not include surveys or tests approved by the Psychology Ethics Committee.

If you intend using a questionnaire as part of your project you MUST attach the proposed questionnaire when submitting the Ethical Assessment Form

# SSC2b: Assessment

See also [SSC2b Key Dates](#)

## Extensions

Students are expected to take responsibility for their SSC projects and plan their time accordingly to ensure they meet the requirements of the course. However, occasionally, circumstances outside a student's control may have an impact upon their work and their ability to submit their assignments in time. In such circumstances, it may be appropriate for a short extension to be granted. For further information, see [Further Assessment Information](#).

## Penalties

There is a single penalty system across all Student Selected Component assignments for all work submitted late. For further information, see [Further Assessment Information](#).

## Word Counts

When assignments are designed, there is thought given to the appropriate word limit. As a result, if you do not adhere to the word limit then you are not satisfying the given assignment brief. For further information, see [Further Assessment Information](#).

## Plagiarism and Academic Misconduct

Academic misconduct, of which plagiarism is an example, is taken very seriously by the University of Edinburgh. Penalties include mark reductions and being referred to the University Student Discipline Committee. For further information, see [Further Assessment Information](#).

## Results

All key assessment dates, including the dates upon which marks are released, are published on the *Semester and Assessment Dates* webpage on the Assessment pages on EEMeC:

<https://www.eemec.med.ed.ac.uk/pages/resourcessidebar/semester-dates-and-assessment-calendar>.

Dates may change throughout the year, so check this file before querying when you will receive your results. A notice will be posted on the EEMeC Discussion Boards notifying students when results have been released. If the results have been released and you are having problems accessing them, please contact the SSC Secretary.

## Marking Criteria

Essentially projects will be assessed similarly to those in SSC2a. The marking criteria are slightly different to take into account the disparate nature of SSC2b projects with less need to provide evidence of critical appraisal. Not all projects require critical appraisal to be included, but for those that are suitable it is expected that evidence of critical appraisal is included.

The website will be assessed by scoring each of the six domains shown below using the marking scale shown, and an overall mark and grade awarded. To justify an overall grade A at least four of the six domains must be rated as excellent.

Domain	Grade
Aims and intentions	
Background: information search	
Background: understanding	
Presentation and argument	
Depth of demonstrated understanding	
Quality of presentation	

Descriptor	Grade	Percentage Mark
Excellent		
Very good		
Good		
Pass		
Marginal fail		
Fail		

Overall mark: __/100	Overall grade:
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## **Frequently Asked Questions**

### **Why should staff in another College be interested in taking on a bunch of medical students in this way?**

- Apparently you are a good bunch of people to teach, as you are bright, and (particularly when you've been able to choose the topic) enthusiastic. Teachers enjoy having bright, interested students who produce something good and are grateful.
- If the tutor is a postgraduate student, or a non-permanent (or not full-time) member of staff from another College, we are able to pay them at the normal University tutorial rates. The commitment to the course should not usually be more than eight to ten hours, including time spent on assessment. We are not permitted to pay full time members of the University academic staff in any College, or employees of NHS Lothian, as their contracts already include teaching time for you. We can cover some expenses, but these must be approved in advance.

### **Why should we produce a website?**

- They demonstrate the ability to produce a significant body of work as a team.
- You will gain insight into how good (or bad!) web-based information is. These sites are accessed, read and quoted by others: remember this when writing the website.
- It gives the examiners some information about each of the courses in the event that any of the final marking seems extreme (in either direction).
- Host departments like them because the tutors and others can point to what they have been achieving with their students.
- These skills are good to have.



# **SSC2 Appendices**

**Appendix 1: Critical Appraisal for SSC2a**

**Appendix 2: Ethical Assessment Form for SSC2b**

**Appendix 3: Guidance Notes on the Ethical Assessment and Approval Process for your SSC2b**

**Appendix 4: Website Mark Scheme**

**Appendix 5: Grade Descriptors**

**Appendix 6: SSC2b Letter**

## SSC2 Study Guide Appendix 1

### Critical Appraisal for SSC2a

#### Introduction to Critical Appraisal & Literature Searching for SSC2:

- Group C (in 3 rotating groups): 10am – 1pm, Thursday 18th September 2014, (*Critical Appraisal* sessions in Room 1.9 Doorway 6, 1st floor, Teviot and *Literature Searching* in Greenfield Suite)
- Group D (in 3 rotating groups): 10 am – 1 pm, Friday 19<sup>th</sup> September 2014, (*Critical Appraisal* sessions in Room 1.9 Doorway 6, 1st floor, Teviot and *Literature Searching* in Greenfield Suite)

#### What is Critical Appraisal?

This is the process of reviewing research evidence and reaching a conclusion as to its validity and relevance. To understand scientific evidence you need to use a systematic and logical approach. It is important to be sceptical. Critical Appraisal is a skill is central to Evidence Based Medicine.

#### Why is Critical Appraisal important?

'Acquiring information is now easier than it has ever been because of the internet. But information is not knowledge. The trouble is that quantity of data ... is no guarantee of quality. Knowing how to evaluate information, therefore, is arguably the most important kind of knowledge that education has to teach' AC Grayling, Professor of Philosophy at Birkbeck, University of London

#### How does Critical Appraisal relate to SSC2?

The purpose of SSC is to learn skills which you may not learn in the more formal taught aspects of the medical course. This may be the first time you have been exposed to primary medical research papers. We don't expect expertise or an in depth statistical knowledge. Gaining critical appraisal skills early in your medical training will make life easier later.

We are particularly interested in students identifying sources of bias in the literature they review. Bias is a term used to describe a preference towards a particular perspective or result. Researchers attempt to eliminate or minimize sources of bias which interfere with the ability to be impartial or objective

SSC2 website markers will be looking for evidence that a group has assessed the evidence themselves rather than simply 'cutting and pasting' information. Ideally the website will also show evidence of a systematic approach, ability to summarise information logically and accurate referencing. It is expected that the group will need help from their tutor and others with a detailed knowledge on particular subjects. It is important that any help is acknowledged formally.

In addition to the formally assessed critical appraisal, it is expected that all students will improve their appraisal skills by debating their research material within groups. Below is a list of headings to help order the critical appraisal. These can be modified to suit your needs and the type of research being assessed (discuss with you tutor)

### **Group Critical Appraisal**

This should be no more than 600 words.

### **Suggested Headings for your Critical Appraisal:**

#### **1. Aims /Objectives of the study**

#### **2. Population / patient group / cell type /animal model**

#### **3. Study design (observational study/clinical trial/lab study/animal experiment)**

#### **4. Size of study (number of patients/participants in any each group or size of population)**

#### **5. Intervention (or treatment / test and any comparison or control group)**

#### **6. Is there a randomisation process and/or blinding (if appropriate)**

#### **7. Were any statistical tests used? How were groups or results compared?** (Were these the appropriate tests? This maybe beyond your knowledge, discuss with your tutor, do not spend too much time on this question!)

#### **8. Outcome measure** (fancy name for the result the study is measuring) What results were measured? Does this measure adequately address the aims?

#### **9. Main results**

express this simply, raw numbers and simple statistics should be used

#### **10. Sources of Bias**

any design flaw which may have interfered with the researchers gaining an impartial result

#### **11. Comments**

Anything you believe relevant including information from other sources which confirms/refutes the research findings including:

- Are the aims clearly stated and appropriately addressed by the study?
- Is the outcome measure used the correct one?

- Where the authors extrapolate from their results, is it appropriate?
- Is the experimental system used relevant for the conclusions reached?
- Does this research agree / disagree with other studies?

## **12. Bottom Line**

Your group's conclusions including: are the results valid/believable/useful?

### **Examples of critical appraisal of clinical research for doctors:**

[www.sicsebm.org.uk](http://www.sicsebm.org.uk)

[www.bestbets.org](http://www.bestbets.org)

These web sites contains good examples of doctors (including trainees) appraising research for clinical use.

ACP Journal Club (Free using Edinburgh University EASE log-in through the journal: Annals of Internal Medicine)

## SSC2 Study Guide Appendix 2

### **Ethical Assessment Form for SSC2**

This form should be completed by both the students and supervisor. The completed form should be emailed to the [SSC Secretary](#).

A copy of the completed form must be kept by the student and included in the final diary submitted for the examiners. When completing this form, refer to the guidance notes in Appendix 2 of this Study Guide.

#### **SECTION A**

Full names of student and matriculation numbers of all students (expand as required):

Email addresses of all student (expand as required):

Name of supervisor:

Email address of supervisor:

Address of supervisor:

Title of project:

Brief outline of project (expand as required):

Dates when the project will be performed:

Group (A, B or C):

Where is the research going to be performed (e.g. hospital / ward, laboratory / building):

## SECTION B

You should work with your supervisor on this task. You should refer to the 'Defining Research' leaflet produced by the National Research Ethics Service (NRES) of the Health Research Authority (HRA) (available online: <http://www.hra.nhs.uk/documents/2013/09/defining-research.pdf>), and use the HRA online decision making tool (<http://hra-decisiontools.org.uk/research/>) to help you establish whether your work is "research" as defined for ethical review purposes, and if you need Research Ethics Committee approval (<http://hra-decisiontools.org.uk/Ethics/>).

1) Does the project involve any modification of investigation, treatment or other aspects of clinical practice? YES / NO

2) Does the project potentially involve physically or mentally invasive procedures on volunteers? YES / NO

**If both answers above are NO then YOU DO NOT NEED TO FILL IN QUESTIONS 3-6, but please sign and date the form below and submit it as detailed above. If you answered YES to either of the above, please complete the remainder of this form in full.**

3) Does your project involve the administration of a questionnaire to patients which asks questions not routinely used in clinical practice? YES / NO

If YES, append the questionnaire.

4) Does your project involve the taking of additional samples from subjects or the administration of drugs or other treatments to subjects? YES / NO

If YES, detail here (expand as required):

5) Could your project cause any physical harm to subjects? YES / NO

If YES, explain above box or attached sheet.

6) Could any subjects be annoyed/embarrassed or upset by the project? YES / NO

If YES, explain in above box or attached sheet.

**If all of the answers to questions 3-6 are NO, no further action is required; sign the form, scan and email to the [SSC Secretary: med-ssc.support@ed.ac.uk](mailto:med-ssc.support@ed.ac.uk).**

If one or more of the answers to questions 3-6 are YES, but your supervisor is uncertain whether ethical permission is required then this form should be completed and sent along with a copy of the protocol to:

Professor Emeritus Kenneth Boyd  
Professor of Medical Ethics  
Biomedical Teaching Organisation  
Doorway 3  
Medical School  
Teviot Place, Edinburgh, EH8 9AG  
Email: [k.boyd@ed.ac.uk](mailto:k.boyd@ed.ac.uk)  
Tel: 0131 650 3109

...who will advise as to whether a full submission to the South East Scotland Research Ethics Service (SESRES) is required.

*All students must sign this form. Expand as required.*

Signed	Student Name

**Supervisor Name:**

**Signed:**

**Date:**

**Email:**

**NHS Status of Supervisor:**

If full submission made to the South East Scotland Research Ethics Service (SESRES) via IRAS, tick here:

If submission made to the College of Medicine Veterinary Medicine Committee on the use of Student Volunteers (MVM Student Ethics Committee, MVMSEC), tick here:

**Please email a copy of the completed form, signed by your tutor and listing all students in your group, to the [SSC Secretary: med-ssc.support@ed.ac.uk](mailto:med-ssc.support@ed.ac.uk). Ensure you also keep a copy for your own records.**

## SSC2 Study Guide Appendix 3

### **Guidance Notes on the Ethical Assessment and Approval Process for your SSC2**

Supervisors should be aware that as Student Selected Components (SSCs) have a large educational component, the ethical criteria to be used differ slightly from those for pure research projects. However if your project scores YES on any of QUESTIONS 3-6 and your Supervisor is sure that a submission to the South East Scotland Research Ethics Service (SESRES) is required, you should use the Integrated Research Application System (IRAS), the standard form for ethics applications across the UK. If you require NHS ethical approval you will also require NHS management approval and you should use IRAS to apply for this too. When you specify this is a student project, with a major educational component, many of the questions do not require to be completed, simplifying the procedure.

The IRAS form is available at: <https://www.myresearchproject.org.uk/> and is completed online.

#### **Advice on Completing Section B of the Ethical Assessment Form for SSC2**

**You should work with your supervisor on this task.**

**You should work with your supervisor on this task. You should refer to the ‘Defining Research’ leaflet produced by the National Research Ethics Service (NRES) of the Health Research Authority (HRA), and use the HRA online decision making tool (<http://hra-decisiontools.org.uk/research/>) to help you establish whether your work is “research” as defined for ethical review purposes, and if you need Research Ethics Committee approval: <http://hra-decisiontools.org.uk/Ethics/>.**

#### **Question 1: ‘Does the project involve any modification of investigation, treatment or other aspects of clinical practice?’**

This question is concerned with any ‘modification of investigation, treatment or other aspects of clinical practice’ **proposed specifically for the purposes of your project**, and not with any ‘modification’ made independently of your project for therapeutic or ethically approved research purposes.

#### **Question 2: ‘Does the project involve potentially physically or mentally invasive procedures on volunteers?’**



Again, this question is concerned with **procedures proposed specifically for the purposes of your project.**

If these procedures are potentially **physically invasive**, and especially if the answer to question 4 or question 5 is 'YES', it is advisable to seek ethical approval from SESRES using the IRAS form.

If these procedures are potentially **mentally invasive**, and especially if the answer to question 3 or question 6 is 'YES', it is advisable to seek ethical approval from SESRES using the IRAS form.

**How do you decide if a procedure, such as administering a questionnaire, or conducting an interview, is mentally invasive? If it could be considered mentally invasive, how should you proceed?**

If the questions to be asked concern the physical or mental health, lifestyle, intimate behaviour or emotions of the proposed respondents or participants, such questions may well be considered to be potentially mentally invasive. Questions about their views or opinions are less likely to be considered invasive, especially if they are asked in an anonymous questionnaire as opposed to an interview where discussion may unintentionally stray onto more personal issues.

If these proposed respondents or participants are **members of a vulnerable group**, e.g., children or many hospital inpatients, then (again especially if the answer to question 3 or question 6 is 'YES'), it is advisable to seek ethical approval from SESRES using the IRAS form.

If the proposed respondents or participants quite clearly are **adults with decision-making capacity and not members of any vulnerable group**, they are entitled to make their own decision about whether or not the questions are mentally invasive and whether or not they wish to respond or take part.

They will be able to decide this however, only if you first:

- explain that this is a student project, being undertaken as part of your education as a future doctor, and that it is up to them to decide whether or not to take part;
- assure them that as a medical student you are bound to respect the confidentiality of any personal or personally identifying information they may give you;
- assure them that any such information will be securely kept only as long as necessary for the project and that they will not be personally identifiable in any report of your project;

- give them as much information as they wish about the nature of your project and what kind of questions you are going to ask;
- tell them that they can decline to answer any of your questions and do not need to continue after having started;
- assure them that any treatment they may be receiving will not be affected in any way if they decide not to take part, and;
- give them adequate time to decide (for example, leave them with information and offer to come back later for their decision), and put them under no pressure to respond or participate.

Obviously, you cannot ask the proposed respondents or participants to decide about this before you (and your supervisor) complete the SSC Ethical Assessment Form. So, in order to be confident about your answer to this question, it's a very good idea to run a pilot. Draw up your questionnaire and try it out on some subjects such as non-medical friends or your family. Then you should get a feel for what is a possibly invasive question. If you have any doubts, then you have to obtain ethical permission SESRES through an IRAS application.

**Anonymity** can be an important consideration in any decision about whether questions are 'mentally invasive'. Potential respondents or participants may be more willing to respond to such questions if their replies are anonymous and not personally identifying. For their replies to be truly anonymous, you should have no direct contact with them. This would exclude interviewing or personally administering a questionnaire, and might involve, e.g., leaving a questionnaire where potential participants could see it, decide for themselves whether or not to complete it, and return it using a sealed envelope. Ideally, the questions should not include any which separately or together could be personally identifying (e.g., occupation, date of birth, gender, postcode, etc.). If such anonymity is possible, it is ethically preferable, but this will depend on the nature and design of your project, which you should discuss with your supervisor.

Furthermore, there are two circumstances in which you should apply for research ethics committee approval:

1. If any of the acts, behaviours and clinical or personal circumstances you wish to report are sufficiently uncommon (e.g. in a psychiatric hospital in-patient ward) to make identification of an individual patient possible
2. If there is any possibility of your report being considered for publication beyond your own educational portfolio

**Use of identifiable tissue samples and patient information for research:** regulations, are detailed in "Governance arrangements for research ethics committees" (GAfREC). These regulations require that for research studies, tissue

and patient information is anonymised to the researcher performing the study, otherwise ethical approval is required. If:

1. this information is robustly coded and all identifiers are removed, so that it is independent of the researcher performing the study (e.g. the student)  
OR

2. this is not for a research study but for an audit or service evaluation ...then ethical committee approval is not required. These regulations and further information are available on the NHS National Health Research Authority page: <http://www.hra.nhs.uk/resources/before-you-apply/>.

### **Research for which your supervisor already has ethical approval**

If your project is undertaken as part of research for which your supervisor already has ethical approval from SESRES, you should check with your supervisor that your name is being added to that approval.

### **Audit and Service Evaluation**

Many SSC projects may be considered not to be research (which requires ethical approval) but audit or service evaluation (which does not require ethical approval). However, distinguishing between what is audit and what is research is not always easy, and some audit can be ‘mentally invasive’, so if you are in any doubt you should regard your project as research.

### **You should refer to the ‘Defining Research’ leaflet produced by the National Research Ethics Service (NRES) of the Health Research Authority (HRA)**

(<http://www.hra.nhs.uk/documents/2013/09/defining-research.pdf>). Further guidance on distinguishing audit and service evaluation from research is available by utilising the HRA online decision making tool: <http://hra-decisiontools.org.uk/research/>; and the online ethical approval tool, which will help you establish whether your work is “research” as defined for ethical review purposes, and whether you need

Research Ethics Committee approval:

<http://hra-decisiontools.org.uk/Ethics/>.

Further information is available on the NHS National Health Research Authority page:

<http://www.hra.nhs.uk/resources/before-you-apply/>.

### **When using these decision making tools, take a screenshot of the final**

**decision screen.** Add this to the ethical review form and any other information you upload into your EEMeC portfolio as the “SSC2a ethics” item (it is planned that these decision making tools will provide an online document as evidence of you having undertaken this process – take a screenshot in the interim).

**Projects involving interviews or surveys of NHS staff:** interviewing NHS staff about the job, opinions, etc. no longer requires NHS ethical review as per NHS policy. However, you do need to contact a member of the Quality Improvement

Team (QIT) as they have a process for registering and approving studies that do not require NHS ethical approval. This process is very simple – just an A4 form. There is also a workbook that accompanies it that helps with deciding what to put on the form. There are a series of QITs that review project proposals and give formal managerial approval to begin; this is also useful if you want to publish your work. The QIT group may contact you if they have any questions.

**Non-NHS Ethical Approval:** if you are approaching potential respondents or participants through their membership of any organisation, you need to enquire if the organisation concerned has its own formal or informal procedures for ethical approval. You may need to seek this in advance of your project, in addition to completing the Ethical Assessment Form and (if necessary) the IRAS form.

## SSC2 Study Guide Appendix 4 Website Mark Scheme

	<b>Fail</b>	<b>Marginal Fail</b>	<b>Pass</b>	<b>Very Good</b>	<b>Excellent</b>
<b>Aims and intentions</b>	<b>0-4</b> Unclear, superficial not justified.	<b>5</b>	<b>6</b> Reasonably clear and detailed. Some justification. Moderate level of ambition. Most aims met.	<b>7 or 8</b>	<b>9 or 10</b> Clear, specific, detailed aims & questions. Justified – “why important?” More ambitious aims. Aims achieved.
<b>Background-literature search and Referencing</b>	<b>0-9</b> Minimal / inappropriate literature review. References mostly from Wikipedia. Next to no integration of primary literature. Poor referencing.	<b>10 or 11</b>	<b>12 or 13</b> Reasonably clearly stated and appropriate literature review. Decent use of original research articles, not just reviews. Reasonable referencing.	<b>14-17</b>	<b>18-20</b> Thorough, effective and extensive literature review. Broad integration of varied sources of information, underpinned primarily by strong use of original research articles as well as review papers. Excellent referencing, with brief comment on additional important references.
<b>Background understanding</b>	<b>0-9</b> Poor overall understanding of basic background of the topic, with major gaps in knowledge	<b>10 or 11</b>	<b>12 or 13</b> Generally good understanding of background subject matter for the topic demonstrated. Some gaps in knowledge	<b>14-17</b>	<b>18-20</b> Thorough understanding of the basic background material upon which to evaluate the specific aims.
<b>Conclusions and argument</b>	<b>0-9</b> Weak conclusions. Random and imbalanced. Poorly reasoned, with no clear development of arguments. No consideration of the implications or application of findings.	<b>10 or 11</b>	<b>12 or 13</b> Generally acceptable conclusions. Reasonably logical. Some attention to balance, and development of arguments. Implications and application generally considered.	<b>14-17</b>	<b>18-20</b> Excellent final, overall conclusions, and in specific sections. Logical, well reasoned and clearly balanced development of arguments. Implications and application very well considered, with thoughtful reference to aims.
<b>Depth of demonstrated understanding</b>	<b>0-9</b> Very superficial, with little depth of understanding. Purely descriptive and reiterating basic background information. Insufficient evidence of detailed critical appraisal (where required) , nor integration of the findings of original research papers. No consideration of limitations or discussion of areas for future work.	<b>10 or 11</b>	<b>12 or 13</b> Some detailed development of ideas. More detailed evaluation than superficial review. Reasonable acknowledgement of limitations and areas for future study/development. Where appropriate, reasonable evidence of detailed critical appraisals, and integration of the findings of original research papers.	<b>14-17</b>	<b>18-20</b> Extensive detailed examination of subject matter. Limitations clearly acknowledged. Thought provoking suggestion and discussion of future study/development possibilities. Excellent integration of the findings of a large number of original research papers, and where appropriate clearly critically appraised in detail.

<b>Quality of presentation</b>	<b>0-4</b> Generally poor. Poorly integrated sections, with no flow. Limited/inappropriate use of audiovisual aids, with inadequate attribution. Poor or absent links; navigation awkward or clunky	<b>5</b>	<b>6</b> Generally good. Reasonably cohesive website overall. Effective use of attributed audiovisual aids. Easy navigation.	<b>7 or 8</b>	<b>9 or 10</b> Excellent overall. Cohesive, seamlessly integrated and consistent final document. Excellent use of properly attributed audiovisual aids that genuinely enhance understanding of the topic, many personally prepared for this specific purpose. Smooth, easy, logical, and flexible navigation.
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SSC2 Study Guide Appendix 5  
**Grade Descriptors**

<b>Excellent</b>		<b>Unsatisfactory</b>
<b>Preparation for session</b>		
Consistently well-prepared (good research and reading, contributes well to group knowledge, reliably completes allocated tasks well)	A, B, C, D, E, F	Consistently unprepared (inadequate reading or researching, contributes little to group knowledge, fails to reliably complete allocated tasks)
<b>Participation during sessions</b>		
Actively participates in discussion, willingly accepts responsibility for tasks	A, B, C, D, E, F	Passive in discussion, reluctantly or does not take on tasks
<b>Group skills</b>		
Takes lead or intervenes appropriately, shows respect for others, helps to resolve conflict	A, B, C, D, E, F	Intervenes inappropriately, shows poor judgment when interrupting, withdrawal/dominating or impatient
<b>Communication skills</b>		
Listens actively, sensitive to others, makes clear and concise statements	A, B, C, D, E, F	Poor listening skills, unable to make summaries, acts autonomously
<b>Professional behaviour</b>		
Excellent attendance, reliable, willingly accepts feedback	A, B, C, D, E, F	Absent without excuse, untrustworthy, difficulty accepting feedback
<b>Critical thinking</b>		
Consistently demonstrates skill in generating critical hypotheses, applying EBM, appraising information and making	A, B, C, D, E, F	Consistently has difficulty in relating to case material, presents in a disorganised fashion, is unable to make a considered judgment

deductions		
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### Example Comments

Comment	Quality/usefulness of comment
<p style="text-align: center;"><b><i>Group-working skills</i></b></p> <p>X is a useful member of the group and contributes reasonably well. However in some sessions she could contribute a little more and sometime seems not to have covered all the material. The information she does report back is always very relevant and well thought out and often includes interesting concepts or ideas. Grade B.</p>	<p>This is a well-constructed comment, summarising well the recipient's good points and some pointers for improvement.</p>
<p style="text-align: center;"><b><i>Professional behaviour</i></b></p> <p>...was often late for the sessions, which held up the rest of the group. This is very annoying for colleagues and needs to be pointed out to the recipient. Grade E.</p>	<p>This is too brief and centres on only one issue. A useful commentary needs to include positive aspects. The student has probably received an artificially low grade. It suggests a low tolerance for this student.</p>
<p style="text-align: center;"><b><i>Communication skills</i></b></p> <p>Excellent communication skills; good at putting ideas forward whilst being sensitive to the needs of others. Articulate, and perfectly understandable. Grade A.</p>	<p>A good comment and very reassuring to the recipient. We can all improve, so you might suggest something they can do even better in another aspect of their performance</p>
<p style="text-align: center;"><b><i>Participation during sessions</i></b></p> <p>Occasionally quiet and really not confident when she does talk. Grade C.</p>	<p>Brief and does not suggest how they might improve. A comment such as "try to speak a bit more" may be added</p>
<p style="text-align: center;"><b><i>Professional behaviour</i></b></p> <p>He could be more tactful in disagreeing with others, as sometimes he can come across as though he is undermining what someone has just said. If people don't agree with him he shouldn't take it personally and go quiet but should continue with the discussion. X has missed several sessions but when he is there he is always on time. Grade B.</p>	<p>There are some useful pointers for the student to address and the grade is probably artificially high, considering the degree of assertiveness and tendency to 'take the huff'</p>
<p style="text-align: center;"><b><i>Participation during sessions</i></b></p>	



<p>Y clearly does lots of work for the session but could do more to share it with the group rather than letting other people talk. Grade A.</p>	<p>A good comment with some carefully worded criticisms that the recipient might be able to address. The grade is artificially high and needs to be viewed in the context of other considerations</p>
<p><b>Critical thinking skills</b></p> <p>Her discussions are usually quite 'low level' and I'm not impressed by her sources of references. Grade F.</p>	<p>The commentary is probably fair, if a little harsh and it might be more helpful to suggest she reads round the topic a bit more and tries to make her approaches more scientific</p>
<p><b>Participation during sessions</b></p> <p>Contributed well. Grade A.</p>	<p>Brief and does not give any details of 'how' they contributed well and what they could do to be even better. Grade suggests peer bias</p>
<p><b>Communication skills</b></p> <p>X is an able and natural speaker and leads discussions well without being bossy or intimidating. He listens to other people's ideas. Grade A.</p>	<p>A good comment. We can all improve, so something may be suggested that can be done even better in another aspect of his performance</p>
<p><b>Group working skills</b></p> <p>X always comes well prepared for sessions. As a result sometimes can take over the session stifling our discussion. Perhaps if she waited for someone else to speak first and didn't feel she had to contribute to every question or issue this would not happen. She always provides references for where she has got the information from and seems to be very thorough using texts no one else consulted. Grade B.</p>	<p>This is well constructed commentary utilising a positive reporting style. There is a useful suggestion of how X could change her behaviour to improve her performance in the group</p>
<p><b>Critical thinking skills</b></p> <p>I have always been impressed by X's thoughts and how easy she finds examining information. I also like the way she makes it easy for us to understand but occasionally it is over my head. Grade B.</p>	<p>A good comment and the grade about right</p>
<p><b>Professional behaviour</b></p> <p>Rob is clearly a showman and as such injects humour into the group. However, he is sometimes a 'bit near the bone' with his smart remarks. I cannot concentrate when he is in 'one of his moods'. Grade E.</p>	<p>This comment could be expanded to offer a suggestion of how he could better use his personality to engage with the session</p>

## SSC2 Study Guide Appendix 6

### SSC2b Letter



#### Dr Rory Mayes

Consultant in Anaesthesia and Critical Care and Pain medicine  
Royal Infirmary  
51 Little France Crescent  
Edinburgh EH16 4SA

2014/2015

Email: [rory.mayes@luht.scot.nhs.uk](mailto:rory.mayes@luht.scot.nhs.uk)

Dear

#### Edinburgh Medicine Second Year Student Selected Component

(see: <http://www.portfolio.mvm.ed.ac.uk/studentwebs/session.asp?s=123>)

During their second year, Edinburgh medical students undertake two 9/10-week blocks of 'Student Selected Components'. The aims of these are to provide experience of self-directed research and in-depth analysis of a question, working as a small group, and to produce a group report in the format of a website. In the first block we provide a range of topics, most, but not all, based on medical sciences. However in the second block (begins January) we encourage students to seek out topics of their own choice, medical and non-medical. Many have produced impressive results, in topics as diverse as anatomy, astronomy, music, art, ecstasy, history and robots. The material covered is therefore not core information for medical practice.

You are probably reading this because students have asked you whether you could look after one of their groups – or could suggest someone who could. It is important to stress that this is **not a request for a substantial block of teaching**. The course is meant to be predominantly self-directed, with tutors providing 'light touch' guidance and supervision. As a broad estimate we expect it to involve 1-2h per week during the first and final weeks the course is running, with mutually organised contact between those times (you could do more if you wanted!). We also ask you to assess the students and their group output at the end of the project using clearly defined criteria.

The students are usually a bright and highly motivated group, and most tutors (>95%) describe the experience as rewarding and enjoyable. Tutors are often impressed by, and subsequently utilise, websites produced by the students. You can see some of the students' websites by following the links from the URL in the heading above. Much other information about the course is linked from there, including evaluation from tutors.

**Funding:** We can bear some expenses if agreed in advance. Full-time academic members of the University staff and employees of NHS Lothian are, unfortunately, deemed to be paid already for teaching and are not eligible for any individual fees. However we are able to pay **tutorial fees** at the standard University rates to postgraduate students, and to part-time staff who are working outside their contracted hours. This has in the past proved an excellent way of attracting (and helping) some tutors.

**What next?** I hope you find this interesting enough to pursue – or know someone who would. If you are happy, the students should submit to me for approval a title, an outline (a few lines only) of the broad area of work proposed, and your contact details. They have further instructions how to do this, which can be read via the website, at 'SSC2B'. This is recommended for tutors also, as it contains additional information. I will then send further details to you, including a paper copy of the handbook and the tutor guide.

Many thanks for your interest. **Please do not hesitate to email if you have any questions at all.**

Yours sincerely,  
Dr Rory Mayes  
Year 2 Student Selected Component Organiser

## **Alternative Formats**

If you require this document in an alternative format please contact the SSC Secretary, via the contact details provided on page three.

### **Disclaimer**

Every effort has been made to ensure that the information contained in this document is correct at the time of going to press. However, it will not form part of any contract between the University and the student and it must be read in conjunction with the Terms and Conditions of Admission set out in the current edition of the University Regulations and Programme of Study (DRPS).

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