A guide to Otago fifth year exams

David Wang

Introduction
The purpose of this article is to help Advanced Learning in Medicine Year 5 (ALM5) students focus on the high yield components when preparing for the University of Otago ALM5 common component exams (fifth year exams). These exams are known to be stressful as there is a wide breadth of knowledge that may be covered, leading to a feeling of not knowing where to start and not being able to evaluate your progress. Here, a systematic approach is described to minimise stress and make preparation for the exam more efficient by prioritising preparation that secures the most marks in the exams.

Disclaimer
The approach described is one method based purely for learning for the fifth year common component exams. Unfortunately, it does not reflect the learning of the “hidden curriculum” and experience required to function as a trainee intern (TI) or house officer.

Passing the exams
There are two components to these exams: (1) the written component, and (2) the Objective Structured Clinical Examination (OSCE). A pass in both is required to pass the exams and move on to the TI year. Table 1 shows the pass criteria for the OSCE and written component.

Table 1. Pass criteria, pass mark, and percentage pass for OSCE and written components

<table>
<thead>
<tr>
<th>Component</th>
<th>%</th>
<th>Subcomponent</th>
<th>% of exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSCE</td>
<td>50</td>
<td>Eight stations</td>
<td>6.3% per eight-minute station</td>
</tr>
<tr>
<td>Written</td>
<td>50</td>
<td>Two MCQ papers</td>
<td>16.7% per three-hour paper</td>
</tr>
</tbody>
</table>

The OSCE consists of eight stations, each eight minutes long with one minute of reading time for the scenario stem and one minute to move between stations. The eight stations test three core competencies: (1) gathering information (history taking), (2) examinations, and (3) explanations. These competencies are tested within clinical scenarios through the disciplines of medicine, surgery, obstetrics and gynaecology (O&G), paediatrics, and psychological medicine. The OSCE is usually held on the Saturday before the written component.

The written component consists of the papers MICN501a, MICN501b, and MICN501c. Each is a three hour paper and the percentage from each paper makes up 1/3 of the total written component score. MICN501a and MICN501b consist of 110 single best answer multiple choice questions (MCQs) across all disciplines: 100 of these will count towards the grade of that paper and ten are used to benchmark Otago ALM5 students against other universities. The benchmarking questions are not highlighted and are mixed with the 100 that count towards the final grade. MICN501c is composed of short answer questions (SAQs). In 2019, this included four long questions (100 marks each) and two short questions (50 marks each). An ethics essay, public health question, and psychological medicine/O&G question tend to make up three of the four long questions (i.e. ~60% of MICN501c). The remaining long question and two short questions (~40%) are wild cards depending on the departments that are invited to submit the questions.

Preparation for exams
Everyone will have their own way to prepare for these exams. There is no right or wrong way, just what is more or less efficient for you. At the end of the day you need to achieve a certain percentage in both the OSCE and written exams, so any preparation should be evaluated on the likelihood it is securing you marks when you sit the actual exams. Table 2 shows a way to think about how to semi-quantify whether you are focusing on the high yield content first by thinking about what percentage you are securing for the time and effort you put into preparation.

Table 2. Percentage breakdown of OSCE and written examinations assuming OSCE and Written are 50% of the entire exam

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Approaching OSCE preparation
The OSCE is 80 minutes long (including the two minutes in between stations) and accounts for half of your grade to passing fifth year. That’s 6.3% of the entire exam per station. There are broad categories that tend to recur that ensure a breadth of knowledge is tested; this knowledge can be used to “secure marks” and guide OSCE preparations. The categories which are almost always present in past OSCE scenarios are a:

- Psychiatric history (mental state exam)
- Paediatric history
Breakdown of core competencies and disciplines with suggested scenario proformas to develop, memorise, and practice as part of OSCE preparations.

<table>
<thead>
<tr>
<th>Surgery</th>
<th>Medicine</th>
<th>Obstetrics &amp; Gynaecology</th>
<th>Paediatrics</th>
<th>Psychological Medicine</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>History taking</td>
<td>Common presentations</td>
<td>Early obstetrics</td>
<td>Newborn</td>
<td>MSE*</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Late obstetrics</td>
<td>Infant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gynaecology</td>
<td>Child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examinations</td>
<td>Neck</td>
<td>Respiratory</td>
<td>NA</td>
<td>NA</td>
<td>Fluid status</td>
</tr>
<tr>
<td></td>
<td>Vascular</td>
<td>Cardiovascular</td>
<td>NA</td>
<td>NA</td>
<td>Post-op fever</td>
</tr>
<tr>
<td></td>
<td>Abdominal</td>
<td>Abdominal</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Orthopaedic</td>
<td>Cranial nerves</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Shoulder</td>
<td>UL neurology</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hand</td>
<td>LL neurology</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Spine</td>
<td>Rheumatoid hand</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hip</td>
<td>Diabetic foot</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Knee</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Explanations</td>
<td>Common diagnoses, procedures, and medications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hauora Māori</td>
<td>Hui process and framework that can be applied to any of the above</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Mental state exam

- Obstetrics and gynaecology – history or explanation
- Medicine – examination and/or history
- Surgical – examination and/or history
- Explanation stations – usually at least two
- Hauora Māori station – Hui process attached to one of the above

One efficient method to “studying” for OSCEs and securing these marks is to develop structured proformas that can encompass as many of the possible scenarios that can arise. Table 3 shows the suggested proformas to develop; the best resource you can use to develop the contents and structure of these proformas is from past OSCE stations that can be found on Moodle. Other OSCE resources may be used to supplement this, but by using past OSCE stations as the primary resource you ensure you are adding the right content to your proforma, which will result in marks in the actual exam.

Structured proformas allow you to systematically cover details to obtain marks, especially under the stress of the actual exam. They are best suited for examinations but can also be applied to history taking and explanations. The act of making the structured proformas with the marking schedule from past exams comprises your ability to obtain marks. Furthermore, once you have created structured proformas for all the components of the table above you can continue to build upon them, so that there will be few scenarios that can catch you off guard, alleviating some stress associated with the “unknown” of the OSCE.

Summary for OSCE preparation:

- Understand the exam structure and distribution of disciplines within a typical OSCE
- Use past OSCE stations on Moodle to develop structured proformas (see Table 3)
- Practice, stress test, and refine the structured proformas with past OSCE stations

Approaching MICN501a & MICN501b MCQ preparation

Talk to TIs who have just completed the fifth year exams; this is a good way to tease out the style of MCQs. In general, pattern recognition within a clinical vignette, and subsequent investigation or diagnosis is required. However, some small details seem to be more prevalent than others and an effective way to learn these details is to do questions banks. The questions banks useful for the development of pattern recognition for MCQs are Get Through Medical School,1 the “blue book”), and the common O&G and paediatrics question banks on Moodle. Question banks like Passmedicine,2 BMJ OnExam,

Approaching MICN501c preparation

The following acts as a minimal checklist that should be done first if you are dedicating time to preparing for MICN501c.

- Look at past exams to gauge level of details and breadth of knowledge
- Create an ethics essay structure. Look at past exam questions. A brief example:
  - Introduction
  - State the assumptions you are making about the scenario
  - Arguments for decision A
  - Arguments for decision B +/- rebuttal
  - How you will implement decision A
  - Conclusion
- Revise public health – study designs, chance, bias, confounding, health promotion, determinants of health (Māori and Pacific models)
- Learn the diagnostic criteria, differentials, and management plan for psychiatric disorders grouped by mood, anxiety, personality, psychotic, addiction, neurocognitive, and eating disorders
- Revise common presentations by discipline, followed by their differentials, work up, diagnosis, and management (use a combination of USMLE Step 2 Clinical Knowledge,6 HealthPathways,7 or similar resources to do so)

Putting it together

Use this checklist if you are preparing for exams and don’t know what to do next. This is good start as it includes actions directly related to securing marks in the exam. You can modify and adapt this once you have devised a system for yourself.

OSCE

- Structured proformas created using past exams and Table 3 above
- Memorisation of structured proformas by practicing with others or yourself
- Practice scenarios (past or created) in your OSCE group with time pressure

Table 3. Breakdown of core competencies and disciplines with suggested scenario proformas to develop, memorise, and practice as part of OSCE preparations.
Written examination
› MCQ resources to complete for pattern recognition
› Blue book
› O&G common question bank on Moodle
› Paediatrics common question bank on Moodle
› Passmedicine or BMJ OnExamination (free for Otago students)
› MICN501c preparation
  › Go through past exams to understand level of detail
  › Create ethics essay structure
  › Revise public health
  › Revise psychiatry, O&G, paediatrics, and pathology
› Other revision to broaden knowledge – Resources and learning styles you find useful.
  › USMLE Step 2 Clinical Knowledge⁵ or Toronto Notes⁶
    (although very detailed)
  › 100 cases in [discipline] book series⁷–¹¹

Distinction
For those striving for distinction in these exams, the criteria are as follows:
1. Be nominated by your school based on performance in ALM4 and ALMS
2. Achieve pass in both written exams and OSCE
3. Achieve aggregate score above distinction threshold

Distinction threshold = 0.6 x OSCE distinction threshold + 0.4 x written distinction threshold

Conclusion
By far the majority of people pass the fifth year common component exams. The difference can be made if your journey towards passing (or distinction) is less stressful and consumes less time. The purpose of this article is to outline a method to reduce the stress and time spent preparing for exams, and to promote a good life balance throughout fifth year. Planning around the marks obtained per preparation hour is a method to achieve academically and strike a good balance of life outside of medical school.

References

About the author
› David is a current trainee intern based at the Dunedin School of Medicine (DSM), University of Otago. He was awarded the Fowler Scholarship for top ALMS DSM student last year.

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