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Section A Course Specific Information

1 Overview

The Medical Student Assessment Program (MSAP) is a tuition free, five-week, online program designed to assess and enhance your readiness for the rigorous basic medical science curriculum. The program consists of upper level biomedical science courses and learning strategies that have been identified as key factors in students’ performance in basic medicine and ultimately on the USMLE Step 1. Great first time USMLE scores and a strong academic record from a respected school of medicine are key to obtaining a successful residency match today. Major components of the course include online lectures, facilitated group sessions, online activities and directed self-study with course notes.

2 Goals and Objectives

This course is pre-admission course to the Doctor of Medicine program at St. George’s University. It is used to determine your readiness to begin the curriculum of the MD course, and to provide a foundation in the key science areas before medical school commences. Students are provisionally accepted into the MD program with their provision being the attainment of 80% in the MSAP. If students complete the MSAP and do not meet that grade, they will be placed in the University’s Charter Foundation.

The overall goal of the course is to provide grounding in biochemistry, gross anatomy, and physiology. This knowledge is intended to serve as a pre-requisite course for medical school and test the understanding of the major concepts in these subjects.

The course aims to facilitate the development of professional competencies required for medical school, which include critical thinking skills, metacognition, self-regulated learning, and team-based inter-personal skills, in particular through facilitated groups sessions and interactive settings.

Detailed objectives for individual lectures are provided within lecture notes.

3 Faculty and Staff

3.1. MSAP Executive Committee Comprised of members of the Committee on Admission, the Dean of Enrollment Planning, the Executive Director of Admission, the Program Director, the Course Director, and the Technology Director. This Committee sets guidelines, policies and procedures for the MSAP, and adjudicates disputes that may arise.
3.2 Principal Faculty

<table>
<thead>
<tr>
<th>Program Director</th>
<th>Course Director</th>
<th>Technology Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Ian Murray</td>
<td>Ms. Joanne Buckland</td>
<td>Mr. Jonathan Modica</td>
</tr>
</tbody>
</table>

Departments | Department Contacts | Contributors
---|-------------------|------------------
Gross Anatomy | Dr. Loukas | Dr. Gilkes  
| | | Dr. Koppelman  
| | | Dr. Loukas  
| | | Dr. Wade  

Biochemistry | Dr. Sharmila Upadhyia | Dr. Mary Maj  
| | | Dr. Chris Martin  
| | | Dr. A. Ghalayini  
| | | Dr. Andrew Sobering  

Physiology | Dr. Mark Clunes | Dr. Mark Clunes  
| | | Dr. Ian V.J. Murray  
| | | Dr. Jaqueline Powell  

During a temporary absence of a Program Director or Course Director or Associate Course Director, a faculty member will be assigned to represent the course and act on their behalf. Details will be outlined on the course website, whenever appropriate.

3.3 Facilitators

Facilitators are assigned by either the Program Director or Course Director, contribute to small group practical sessions and participate in student support. They will assist the students in understanding the course content and can be upper term SGU students or SGU demonstrators.

3.4 Facilitator

Dr. Deepika Tanwar (Facilitator Fall 2014)
4 Contact Information

4.1 Initial Contact

For initial contacts and administrative questions, please use the Medical Student Assessment Program Course Email:

MSAP@SGU.com

For technical issues, please contact Medical Student Assessment Program Technical Issues Email:

MSAPTechnical@sgu.edu

4.2 Content Related Questions

The primary platform for content-related questions is the online Discussion Forum within the MSAP course website. Students can post new questions or respond to posted questions. Faculty will monitor the discussion and participate whenever appropriate.

Typical discussion forum format, with prompts and conversation threads include:
- Overall Course discussion – for major topics or general discussion
- Forum prompts within a unit – to prompt discussion around particular content
- Instructors and peers can vote up good conversations.

4.3 Individual Help

For all content related questions you should first try the appropriate online Discussion Forum (section 4.2 above) as your question may have already been answered. To be able to provide you with individual help, it is suggested that for initial contacts and for administrative questions you use the MSAP course email (MSAP@sgu.edu). There are discussion forums for general course related questions, as well as for all lecture, clinical case discussion and small group practical modules. In using the online help structures first, you enable us to address problems quickly and in the most efficient way.
5 Course Material

5.1 Course Website

The MSAP course is offered via SGU Online, our open online course portal. SGU Online is built on the Open EdX platform, an education platform developed by Harvard and MIT. SGU Online is built to be open, accessible, and to foster communication between student peers and university faculty. Courses will consist of mainly video lectures, assessments, and forum discussions. You will be guided through the use of these features as the course progresses.

You will be invited to the course via e-mail sent to your @sgu.edu address. From that e-mail, you can register and set a password. Please contact MSAPTechnical@sgu.edu with any registration/log-in issue.

5.2 Material Provided

Lecture Slides: will all be available on online.sgu.edu as PDFs.

5.3 Suggested Books

You do not need to purchase any books for this course. Most lecture materials will be in video format. Any supplemental materials (e.g. PowerPoints or PDFs) will be provided as links or downloads.

You do not need to purchase course materials, as all content is provided.

5.4 Computer and Internet requirements

You will need a fast, reliable Internet connection to access course resources. You should have 2mb/s upload and download to make sure you can access all course content. You can easily check your download/upload speed by going to: http://www.speedtest.net/

To take the quizzes and the final exam you need to make sure you also have the necessary bandwidth for the entire length of the quizzes/exam, which range from 30 minutes – 2 hours. In addition, you will also need a webcam for quizzes and the final exam. All modern computers should work well on our platform; we recommend at a minimum 1 GB of memory/RAM. We support the following web browsers:

- Google Chrome (newest version). Note: Ubuntu users may have to install the chromium-codecs-ffmpeg-extra package to make the videos work in Chromium, Firefox (23+), Safari (6.0+), or Internet Explorer (9+)
6 Components of the Course

6.1 Lectures

The following tables refer to the numbering used in the administrative schedule. You also find this information on the MSAP course website.

Pre-Course materials

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Topics</th>
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<tbody>
<tr>
<td></td>
<td>Learning Strategies</td>
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</table>

Week 1:

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Topics</th>
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<tbody>
<tr>
<td></td>
<td>Introduction to Biochemistry</td>
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<tr>
<td></td>
<td>Introduction to Cells: Anatomy</td>
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<tr>
<td></td>
<td>Introduction to Cells: Physiology</td>
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<tr>
<td></td>
<td>Week 1 Quiz 1</td>
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Week 2:

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Topics</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Learning Strategies</td>
</tr>
<tr>
<td></td>
<td>Autonomics/ Peripheral Nervous system- Anatomy</td>
</tr>
<tr>
<td></td>
<td>Autonomics/ Peripheral Nervous system- Physiology</td>
</tr>
<tr>
<td></td>
<td>Musculoskeletal: Anatomy</td>
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<tr>
<td></td>
<td>Musculoskeletal: Physiology</td>
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<tr>
<td></td>
<td>Musculoskeletal: Biochemistry</td>
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<tr>
<td></td>
<td>Digestive system: Anatomy</td>
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<tr>
<td></td>
<td>Liver, Gall bladder, pancreas: Anatomy</td>
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<td></td>
<td>Week 2 Quiz 2</td>
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</tbody>
</table>

Week 3:

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Topics</th>
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<tbody>
<tr>
<td></td>
<td>Digestive: Biochemistry</td>
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<tr>
<td></td>
<td>Gut motility: Physiology</td>
</tr>
<tr>
<td></td>
<td>Gut secretions: Physiology</td>
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<td></td>
<td>Cardiovascular: Anatomy</td>
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<tr>
<td></td>
<td>Cardiovascular: Physiology</td>
</tr>
<tr>
<td></td>
<td>Cardiovascular: Biochemistry</td>
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<tr>
<td></td>
<td>WEEK 3 Quiz 3</td>
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<tr>
<td></td>
<td>WEEK 3 Survey</td>
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</tbody>
</table>

Week 4:

<table>
<thead>
<tr>
<th>Lectures</th>
<th>Topics</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Respiratory System: Anatomy</td>
</tr>
<tr>
<td></td>
<td>Respiratory System: Physiology</td>
</tr>
<tr>
<td></td>
<td>Respiratory System: Biochemistry</td>
</tr>
<tr>
<td></td>
<td>Renal System: Anatomy</td>
</tr>
<tr>
<td></td>
<td>Renal System: Physiology</td>
</tr>
<tr>
<td></td>
<td>Renal System: Biochemistry</td>
</tr>
<tr>
<td></td>
<td>WEEK 4 Quiz 4</td>
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Week 5:

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Study week</td>
</tr>
<tr>
<td></td>
<td>WEEK 5 Final Exam</td>
</tr>
</tbody>
</table>

Medical Student Assessment Program (MSAP) Course Syllabus
6.2 Online Facilitation Groups

Facilitation Groups are run by student facilitators or SGU demonstrators, and are intended to serve as a live forum where students can discuss the course materials and get help. Facilitated group sessions are offered during different days and times to accommodate for students’ schedules.

Facilitation session times will be released at the beginning of each week.

6.3 Remedial Opportunity for Missing a Facilitation Group

If a student has missed a facilitated group, they are encouraged to view the recorded session.

6.4 Online Activities- Discussion Forum

The MSAP also has an online Discussion Forum via Facebook. This can be found on the MSAP Facebook page https://www.facebook.com/groups/1504236369795784.

6.6 Directed Self Study/Group Study

For all content related questions you should first try the appropriate online Discussion Forum (section 4.2 above) as your question may have been answered. However, we do promote group discussion and online study groups via the MSAP Facebook page (https://www.facebook.com/groups/1504236369795784).

Apart from studying on their own, students can organize informal study groups of 3 to 5 active members. These groups should meet 1 to 2 times a week to discuss difficult concepts. Active participation in these small group discussions is an essential part of the course and helps to successfully master the material. This has proven to be one of the most important aspects of study for student success in basic sciences at SGU.
7 Course Assessments

7.1 Assessment Points

A total of 100 assessment points can be earned in the course, as listed in the table below:

<table>
<thead>
<tr>
<th>Assessments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz 1</td>
<td>8</td>
</tr>
<tr>
<td>Quiz 2</td>
<td>12</td>
</tr>
<tr>
<td>Quiz 3</td>
<td>15</td>
</tr>
<tr>
<td>Quiz 4</td>
<td>15</td>
</tr>
<tr>
<td>Final Examination</td>
<td>50</td>
</tr>
</tbody>
</table>

**Assessment Percentage Total:** 100

Please consult the MSAP course website regularly for updates and details on written examinations and mandatory online activities.

7.1.1 Assessment formats

Assessments – The quizzes and final are multiple-choice questions. Completion quizzes and final exam may be in another format as determined by the Program and Course Directors.

7.2 Facilitated groups

Attendance is highly recommended but optional.

7.3 Assessment of Professionalism

Professional communication and interpersonal skills will be monitored and expected in every small group practical session and emails. Professionalism includes timeliness, compliance, accountability, appearance, interactions, teamwork, motivation and respect. No points are assigned.
Section B Uniform Policies and Procedures, Medical Student Assessment Program (MSAP)

8. Policy Overview

Policies applicable to the course are published in the following documents:
- Course Syllabus (this document)
- Examination Policies and Procedures (this document)
- Uniform Policies and Procedures (this section below)

8.1 Student Responsibilities

- Attend groups regularly and on time
- Check SGU email daily
- Check course website daily for announcements and updates
- Check posted results of assessments on time
- Actively participate in facilitated group activities
- Participate in Online Group discussions
- Post questions to the Online discussion board
- Report illness to the Program Director or Course Director as outlined in this document
- Ask for help early if struggling
- Participate in Course and Instructor Evaluations

8.2 Attendance

Requirements
The course itself should take no more than 3 hours per day – however you will also need to plan for additional time to review and study. You should plan on approximately 30 hours a week in total depending upon your pace of learning.

Student Responsibility
It is the responsibility of each student to provide their own computer or electronic devices for viewing classes and respond to questions presented during each facilitated group session. Students are responsible to ensure that their computers/devices are functional.
8.3 Electronic Examinations (Quizzes, and Finals)

All exams will be offered only in the computer-based format. Students must use a computer with the appropriate specifications to these examinations.

Examinations are governed by this syllabus - Policies and Procedures for Electronic Examinations (see section 8.4 below). All students are responsible for knowing and complying with this Conduct.

8.3.1 Cheating

According to this syllabus, students must be above suspicion in all testing situations. When cheating is suspected, it is not the obligation of the University to prove violation beyond a shadow of a doubt, but rather by a preponderance of the credible evidence submitted.

In case of a suspicion indicating that the integrity of an examination might have been compromised, the Course Director, in consultation with the faculty and the administration, may nullify the examination and announce a new date for a replacement examination within a period of seven working days after the original.

8.3.2 Exam Announcement

An examination announcement will be posted on the course website prior to each examination. It will outline the specific policies and procedures governing this examination.

In the process of entering student scores for examinations into the Gradebook of the online course management system, the site may be temporarily shut down until the transfer of data is completed.

8.3.3 Exam Feedback

All electronic examinations are sequestered and are not available subsequently for individual review. Queries about the examinations can be directed to the Program and Course Directors but specific answers to test questions will not be addressed.
8.3.4 Missing exams- excuses, illness.

Attendance at scheduled educational activities is a part of professionalism. You are expected to attend mandatory activities.

MSAP students are expected to be present for all quizzes, and examinations. If you have a serious illness which prevents you from participation, you must send your reason to MSAP@sgu.edu and receive permission to be absent before the activity occurs.

Missed quizzes will be given at the same time two days after the scheduled quiz.

If the final exam is missed the completion exam will be scheduled the Monday following the scheduled examination.

If you miss a quiz or the final examination and have not notified the MSAP administration via MSAP@sgu.edu, you will be given a “0” grade for that quiz/exam.

8.4 Policies and Procedures for Electronic Examinations

8.4.1 Announcement of Exam-Specific Information

An announcement will be made through the electronic course management system, usually three days before examination day, including:

- Exam Specifications
  - Number of Questions
  - Duration of the Examination (minutes)

8.4.2 Exam Conditions

Full exam conditions apply at any time while taking the exam. A student may not open any files, websites, or programs that are not required for taking the examination.

The following are the test policy for all exams and quizzes.

- **Do not cheat** - cheating or attempting to deceive during this exam session is a violation

- **Do not impersonate another person** - Taking the place of another candidate or having another person take your place will flag your test in violation
Do not allow others to access your test- Allowing another person/people to access your secured test or computer using screen-sharing application is not allowed.

Do not reproduce your test- photographing, screenshots, or printing any part of your test will flag your test in violation.

Do not open any other applications- Leaving the test session or opening any other software, browser or webpage that is not required for the test is a breach of test policy.

Do not use additional hardware- You are only allowed to have one monitor, one keyboard, and one mouse attached to your computer during your test.

Do not leave camera view- While taking the test, make sure that you stay within camera frame at all times.

Turn off all mobile device- Communicating to anyone using any manual or electronic medium is not allowed. Even a vibrating phone can flag your test in violation.

Do not eat or drink- Consuming any food or drink during the test is not allowed.

Do not be in a room with others- If others are detected in your testing area, your test will be flagged in violation.

Do not look away off-screen- Looking off screen to glance or to read notes is not allowed.

Do not make notes- You may not make notes or calculations on your computer, on paper or any other device unless test instructions implicitly state to do so.

Restroom breaks are not allowed- Leaving your test for any reason, even to use the restroom, is not allowed. (If you need to go to the restroom, go prior the exam).

Ensure your face is clearly visible- Anything that obscures your face can flag your test in violation. This includes but is not limited to: hair, sunglasses and hats. Reading glasses are acceptable, however.

No background motion allowed- Ensure that nothing in the background will move or change in appearance.

Do not make a copy of any of the test questions by any means before, during or after the test.
8.4.3. Finishing the Examination

The end time of each individual examination is determined by the maximum time allowance settings by the software. A student may finish the examination earlier at any time (with exceptions, as indicated above). In these cases, the student should proceed to uploading the examination, until the green screen for successful upload is visible.

PLEASE NOTE: Do not navigate away from the green screen until the exam is completed.

8.4.4. Question Review

Question review by faculty will be based on thorough statistical analysis of the examination as a whole, as well as every single test item. Currently, there is no provision for individual student review requests.

All electronic examinations are sequestered and are not available subsequently for individual review.

8.5 Online Activities

Mandatory Online Activities, such as assignments, evaluations, and similar activities, which may be associated with other scheduled activities, are regarded as an essential part of a course. They may contribute to the points that can be earned in a course (see Section A Course Specific Information).

Online Activities, participation in Online Quizzes in particular, require students to follow the code of conduct outlined in the syllabus. Most Online Quizzes will show the Examination Honor Code before access to the questions. Online Quizzes are sequestered examinations, similar to written examinations, and the syllabus prohibits any form of cheating. It is illegal to print, copy, or otherwise reproduce any part of the Online Quizzes.

For the Online Activities, students have to be logged on to the online course management system using their personal student ID and their individual password. Required Online Activities will be listed in the course management system. Their due dates (deadlines) will also be indicated in the online calendar.

After the submission of an Online Activity, it is the responsibility of the student to immediately check whether the submission has been correctly registered by the online course management system. – check your Gradebook to confirm a successful submission.
Students who are unable to access, participate, or submit these Online Activities due to technical errors, or with similar validated excuses out of their control, have to report via the respective Course emails, while the Online Activity is still pending, i.e. before the deadline.

8.6 Scoring and Grading

Grades are awarded objectively based on points earned in the course. The total number of points available and a breakdown of how these points can be earned are listed in Section A (Course Specific Information) of this document. No additional points are available.

8.6.1 Question Review Procedure

If a test item (question) is deleted, for any reason, after the conclusion of an examination, all responses to the question will be accepted as correct.

The final decision about question flaws and the appropriate adjustment rests with the Program Director.

8.6.2 Grading

Before the start of the grading process, all decisions about individual questions, which may have been made during the question review process, will be considered as final.

The MSAP final grade will be used by the Committee on Admission to determine your eligibility to join the upcoming MD program. Those who make the grade requirement stated on the letter of acceptance will receive a full acceptance letter. Those who do not, will receive a letter accepting them into the upcoming Charter Foundation Program.

8.6.3 Publication of Results

Results of all assessments will be published in the online course management system. The results of all electronic examinations will usually be posted at the end of the examination period.

After the results of an electronic examination, an online assessment, or a grade has been published; it is each student’s responsibility to check the published results.
8.6.4. Reporting of Errors

Errors in published scores for written examinations (and other course assessments manually entered into the Gradebook) must be reported to the Course Director for validation within two weeks of their publication.

For Online Assessments where results are accessible upon submission, errors must be reported immediately and well before any published deadline for the Online Assessment. Technical errors reported after the deadline will not be considered.

8.6.5 Change of Published Results

A published result can only be changed if the published score is incorrect. Once grades have been published for two weeks or more, a student may NOT contest any aspect of the examination, assessment, or grading process.

Section C How to Study Biochemistry, Gross Anatomy and Physiology

9 Study Guide

9.1 Before Viewing the Lectures and Sessions

- Preview the lecture material (10 to 15 minutes for most students)
- One method is to turn the learning objectives into questions and write or type them into your lecture package alongside or above the section in they match. This encourages active learning as you listen to the expert telling you the answers to the learning objects during the course of the lecture. It also means you are learning in real time during the lecture (never write out the answers to the learning objectives as it is passive “do” work).
- Focus on the core lecture materials and any supplemental assigned readings
- You can use the same method above of creating questions as you do your readings by turning the titles and subtitles into questions and reading that section to answer the question.
9.2 Participation in Group Review Sessions
- Come prepared to the review groups and arrive on time
- Actively participate in interactive discussions
- Actively take your own notes
- Actively contribute to discussions
- Focus on key problems and questions
- Get answers to your weak areas

9.3 After lectures and Group Review Sessions
- Follow up each scheduled session within 24 hours whenever possible
- Review handouts, assigned readings and your personal notes based on learning objectives
- Do multiple choice practice questions (MCQ)
- Identify your weak areas by trying to regenerate your knowledge without looking at your notes, by doing practice questions often, and by being aware of the gaps in your knowledge during the group review sessions

10 Preparation for Quizzes and Exams
- Be guided by learning objectives
- Time management: don’t just spend more time for learning be sure to include time for breaks, recreation and sleep
- Plan sufficient time between your studies and the actual exam; cramming during the last day before the exam is of no help

11 Asking for Help

The research shows that those students who need help the most are the least likely to seek it out. When in trouble, ask for help early: chances to develop successful strategies increase dramatically, the earlier problems are identified.

There are a number of avenues where you can find help (Links: Faculty, Contact information and Facilitation):
- Course Director
- Program Director
- MSAP IT Team
- Review group facilitator
- Learning Strategist
- Online Facilitation