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THE GOLD STANDARD GAMSAT

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PREFACE

No science background in university? Great in the sciences but little experience reading from the humanities or writing essays? Had a bad experience with a high school physics teacher? Full time arts student? Full time mom? Part time job? It's OK. The Gold Standard has you covered. This is not just a textbook, it is a learning experience.

The Gold Standard has integrated textbook reading with many free features including online problem solving with explanations, essays for you to review in the book and online, 10 hours of online teaching videos with ideas presented in clear terms, online equation lists and organic reaction summary, hundreds of additional practice questions, a full length paper practice test with online answers, detailed explanations and a forum thread to discuss every individual question - for free - and much more. We also offer - separately or in packages - the Gold Standard GAMSAT DVD with helpful strategies for all test sections; 16 science review DVDs prepared for the MCAT which, thankfully, contain all the major GAMSAT science topics clearly explained; and to increase study efficiency: flashcards, MP3s and an iPhone application.

The flashcards and iPhone App point to which section in the book you can find more details. The book points to which DVD you can use as a lecture. The videos and the explanations to the practice tests also point to specific sections of the book should you require clarification. Thus we created a multimedia integrated approach so you can choose the tools that help you study best.

Now let's discuss medical school admissions. Your GPA and GAMSAT score can write the ticket for a medical school interview where success opens the door for admissions. Our aim is to be of help every step of the way. Herein lies a comprehensive section by section review for the GAMSAT, a concise examination as to how you can improve your grades at school, and a 'to the point' approach on the non-academic aspects of the admissions process: in particular, medical school interviews and, for those that require them, autobiographical materials and letters of reference. The medical interview section can stand alone or can be used in conjunction with The Gold Standard Medical School Interview DVD where I conduct a live interview in front of a class on campus and then analyze each response question by question.

Truly, The Gold Standard has evolved into a complete reference textbook for the premedical student and other students who may need to sit the GAMSAT. Learn well and it will be reflected in your performance.

Good luck!

– B.F., MD



Table of Contents

Preface	v
Introduction	i

Part I: MEDICAL SCHOOL ADMISSIONS

1. Improving Academic Standing	5
2. The Medical School Interview	11
3. Autobiographical Materials and References	19

Part II: UNDERSTANDING THE GAMSAT

1. The Structure of the GAMSAT	25
2. The Recipe for GAMSAT Success	33
3. Review for Section I	39
4. Review for Section II	71

Part III: THE PHYSICAL SCIENCES

A. General Chemistry	CHM-01
1. Stoichiometry	CHM-03
2. Electronic Structure and the Periodic Table	CHM-13
3. Bonding	CHM-25
4. Phases and Phase Equilibria	CHM-35
5. Solution Chemistry	CHM-47
6. Acids and Bases	CHM-57
7. Thermodynamics	CHM-71
8. Enthalpy and Thermochemistry	CHM-79
9. Rate Processes in Chemical Reactions	CHM-89
10. Electrochemistry	CHM-101

B. Physics	PHY-01
1. Translational Motion	PHY-03
2. Force, Motion, and Gravitation	PHY-11
3. Particle Dynamics	PHY-19
4. Equilibrium	PHY-25
5. Work and Energy	PHY-33
6. Fluids and Solids	PHY-39
7. Wave Characteristics and Periodic Motion	PHY-49
8. Sound	PHY-61
9. Electrostatics and Electromagnetism	PHY-67
10. Electric Circuits	PHY-77
11. Light and Geometrical Optics	PHY-89
12. Atomic and Nuclear Structure	PHY-99

Part IV: THE BIOLOGICAL SCIENCES

A. Biology	BIO-01
1. Generalized Eukaryotic Cell	BIO-03
2. Microbiology	BIO-21
3. Protein Synthesis	BIO-29
4. Enzymes and Cellular Metabolism	BIO-35
5. Specialized Eukaryotic Cells and Tissues	BIO-47
6. Nervous and Endocrine Systems	BIO-61
7. The Circulatory System	BIO-81
8. The Immune System	BIO-91
9. The Digestive System	BIO-97
10. The Excretory System	BIO-105
11. The Musculoskeletal System	BIO-113
12. The Respiratory System	BIO-121
13. The Skin as an Organ System	BIO-127
14. Reproduction and Development	BIO-133
15. Genetics	BIO-145
16. Evolution	BIO-155

B. Organic Chemistry	ORG-01
1. Molecular Structure of Organic Compounds	ORG-03
2. Stereochemistry	ORG-13

3. Alkanes	ORG-21
4. Alkenes	ORG-29
5. Aromatics	ORG-37
6. Alcohols	ORG-45
7. Aldehydes and Ketones	ORG-53
8. Carboxylic Acids	ORG-61
9. Carboxylic Acid Derivatives	ORG-67
10. Ethers and Phenols	ORG-75
11. Amines	ORG-81
12. Biological Molecules	ORG-87
13. Separations and Purifications	ORG-101
14. Spectroscopy	ORG-107

APPENDICES TO THE GOLD STANDARD TEXT

Appendix A: GAMSAT Math Review	601
Appendix B: The Imperial and Metric Systems	606
Appendix C: The Experiment	607
Appendix D: Study Aids for the GAMSAT	608

Part V: GOLD STANDARD GAMSAT* EXAM

1. The Gold Standard GAMSAT	611
2. Practice Test GS-1	GS1-1

Part VI: ANSWER KEYS & ANSWER DOCUMENTS

1. Cross-referenced Answer Keys	AK-3
2. Answer Documents	AK-5

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INTRODUCTION

The GAMSAT (Graduate Australian Medical School Admissions Test), developed by the Australian Council for Educational Research (ACER), helps determine whether a student with at least a bachelor's degree can advance their studies in medicine, dentistry, pharmacy and veterinary science. In many ways, modeled after the MCAT which has a 70 year history, the GAMSAT was developed for the universities in Australia in the mid-1990s and, more recently, has been used as a component of the admissions procedure at a growing number of institutions in the UK and Ireland.

The GAMSAT is divided into 3 sections: (i) Section I: Reasoning in the Humanities and Social Sciences; (ii) Section II: Written Communication (two essays); and (iii) Section III: Reasoning in the Biological Sciences (biology and organic chemistry) and the Physical Sciences (physics and general chemistry).

The Gold Standard will expose the GAMSAT section by section. Exam-taking tips for the GAMSAT, the Recipe for GAMSAT Success, and a review with strategies for Section I and Section II will all be explored. After which, a comprehensive and fully illustrated science review will follow. The science review contains physics, general chemistry, biology, and organic chemistry - all in the necessary detail. Hundreds of chapter review questions are online and you will also be able to use the pull-out full length simulated GAMSAT test at the back of this textbook. Thus the information you learned will be put into practice. You will also have online access to 10 hours of teaching videos which most students find very helpful. This book, in combination with the free online videos or the more comprehensive Gold Standard science review DVDs, will be able to teach the student without a science background from the bottom up or serve as a fresh basic review for the advanced student in science. You will not be required to consult any textbooks and, if you are doing so, you are likely chasing salient details that are not required for the GAMSAT.

The GAMSAT is a reasoning test. You must master some basic scientific principles but memorization alone will not get you far. You are to do a "science survey" to get a foundation NOT a marathon of memorization. We understand this tenet and we have designed this book to emphasize this reality by describing in front of each chapter: what to memorize, what to understand and what is simply not required.

Your formula for success comes in 3 parts: content review, practice problems and full length testing. We will guide you through the process.

Let's begin...





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MEDICAL SCHOOL ADMISSIONS

PART I

MEDICAL SCHOOL
ADMISSIONS





IMPROVING ACADEMIC STANDING

1.1 Lectures

Before you set foot in a classroom you should consider the value of being there. Even if you were taking a course like 'Basketweaving 101', one way to help you do well in the course is to consider the value of the course to **you**. The course should have an *intrinsic* value (i.e. 'I enjoy weaving baskets'). The course will also have an *extrinsic* value (i.e. 'If I do not get good grades, I will not be accepted...'). Motivation, a positive attitude, and an interest in learning give you an edge before the class even begins.

Unless there is a student 'note-taking club' for your courses, your attendance record and the quality of your notes should both be as excellent as possible. Be sure to choose seating in the classroom which ensures that you will be able to hear the professor adequately and see whatever she may write. Whenever possible, do not sit close to friends!

Instead of chattering before the lecture begins, spend the idle moments quickly reviewing the previous lecture in that subject so you would have an idea of what to expect. Try to take good notes and pay close attention. The preceding may sound like a difficult combination (esp. with professors who speak and write quickly); however, with practice you can learn to do it well.

And finally, do not let the quality of teaching affect your interest in the subject nor your grades! Do not waste your time during or before lectures complaining about how the professor speaks too quickly, does not explain concepts adequately, etc... When the time comes, you can mention such issues on the appropriate evaluation forms! In the meantime, consider this: despite the good or poor quality of teaching, there is always a certain number of students who **still** perform well. You must strive to count yourself among those students.

1.2 Taking Notes

Unless your professor says otherwise, if you take excellent notes and learn them inside out, you will *ace* his course.

Your notes should always be up-to-date, complete, and separate from other subjects.

To be safe, you should try to write everything! You can fill in any gaps by comparing your notes with those of your friends. You can create your own shorthand symbols or use standard ones. The following represents some useful symbols:

·	<i>between</i>
=	<i>the same as</i>
≠	<i>not the same as</i>
∴	<i>therefore</i>
Δ	<i>difference, change in</i>
cf.	<i>compare</i>
̄c or w	<i>with</i>
̄c out or w/o	<i>without</i>
esp.	<i>especially</i>
∵	<i>because</i>
i.e.	<i>that is</i>
e.g.	<i>for example</i>

Many students rewrite their notes at home. Should you decide to rewrite your notes, your time will be used efficiently if you are paying close attention to the information you are rewriting. In fact, a more useful technique is the following: during class, write your notes only on the right side of your binder. Later, rewrite the information from class in a complete but condensed form on the left side of the binder (*this condensed form should include **mnemonics** which we will discuss later*).

Some students find it valuable to use different color pens. Juggling pens in class may distract you from the content of the lecture. Different color pens would be more useful in the context of rewriting one's notes.

1.3 The Principles of Studying Efficiently

If you study efficiently, you will have enough time for extracurricular activities, movies, etc. The bottom line is that your time must be used efficiently and effectively.

During the average school day, time can be found during breaks, between classes, and after school to quickly review notes in a library or any other quiet place you can find on campus. Simply by using the available time in your school day, you can keep up to date with recent information.

You should design an individual study schedule to meet your particular needs. However, as a rule, a certain amount of time every evening should be set aside for more in depth studying. Weekends can be set aside for special projects and reviewing notes from the beginning.

On the surface, the idea of regularly reviewing notes from the beginning may sound like an insurmountable task which would take forever! The reality is just the opposite. After all, if you continually study the information, by the time mid-terms