Thou hast made it!
Oh Young Chemista, if you are now reading this, you have passed your general chemistry courses and have entered the wonderful world of Organic Chemistry! Just as a squire earns his knighthood, once you succeed you will have earned the right to call yourself a true organic chemist. As you embark on your journey, you will be confronted with two paths: one of success, the other to certain failure. With these guidelines, you will know the way and the way will know you.

What is Organic Chemistry?
Organic Chemistry is the chemistry of the compounds of carbon. These compounds are essential to life on this planet. They comprise our DNA, and all the other essential compounds that constitute our blood, muscle, and skin. Young Chemista, without the grandeur that is organic chemistry, we would not be here revel in its pleasures.

With these guidelines I cast upon thee...
With your valor as your armor, your mind as your sword, and these guidelines as your spell book you shall be able to conquer any ticklish questions your adversaries may cast your way. From lecture to lab, from studying to the glorious day that you duel the test, the information contained in these scrolls teaches you the way.

With every set of scrolls, there is a…disclaimer?
A wise man once said, “A sword is only as powerful as the hand that wields it.” While these guidelines will provide you with a method for performing well in organic chemistry, they cannot ensure that you will receive an A. In order for that to happen, you must invest much time and effort for such pleasures to ensue. These guidelines reveal to you what will be necessary to succeed in this course. The strength lies within you, and you must wield the sword.

On thy journey, thou must take along...
- Solomons/Fryhle “Organic Chemistry”
- Solomons/Fryhle Study Guide (Solutions Manual)
- Klein “Organic Chemistry as a Second Language”
- Lab Book
- Thy Strength, Honor and Valor
This section will teach thee how to make the most out of thy lectures. One may be quick to judge professors as spawns of the underworld but they are in fact the beings students must desire to emulate. Their mastery of organic chemistry is unparalleled and they seek to impart their knowledge onto thee. Accept this honor, and present thyself accordingly:

1. To be prepared for lectures one must:
   - Read the relevant chapters before attending lecture.
   - Solve the in-text problems while reading the chapter: In the book there are problems within the chapter. As you read, solve these problems; they will assess your understanding of the material covered in that section. If you cannot solve the problem, re-read the section and try again.
   - Review the class notes from the last lecture.
   - Write down any questions the literature could not answer: Save these and take them with you to class.

2. To make the most out of attending lectures, one must:
   - Take thorough notes.
   - Ask Questions: Remember those questions you wrote while reading? Yes? Well, you must not hesitate to ask them! Go ahead...ask!
   - Attempt to answer questions asked by the professor: Professors will appreciate your enthusiasm and will see that you are eager to learn. Don’t be afraid to be wrong, young chemista! Think about it this way: if you are right, you may get extra points for your display of brilliance; however, if you are wrong, you shall learn from your mistake.
   - Clarify aspects of notes by approaching the professor: Conjure up your courage to ask the professor to clarify unclear aspects of your notes. He/She may be able to help you immediately. If not, an appointment can surely be scheduled to help you see the light.
This section will teach thee how to make the most out of thy experience in the lab. Lab is a time that thy can apply the reactions and theory thou hast learned in lecture to produce an actual organic product. Lab will teach thee how to conduct thyself in the real world when thou hast graduated and become a professional. This is the time to establish and hone thy laboratory skills. Before one mounts his steed, one must set the saddle!

1. Before each lab period, it is imperative that one:

   - Read the relevant experiment: While reading over the experiment, try to understand its purpose and the reactions taking place within it. It necessary for a young chemist like yourself to understand what the results should be of the experiment. Also, try to understand the reaction mechanisms that were involved in forming the product. Doing so will not only help you in lab, but also in lecture when covering relevant material.

   - Understand the procedure: In order to ensure that one efficiently performs the experiment, it is important that one understands the purpose of the major procedures executed during the experiment. You must comprehend what procedures lead to what reactions and why certain reagents are added to reaction mixtures.

2. To perform the experiment successfully:

   - Follow the procedure carefully: While you may have understood the procedure as you wrote your pre-lab, be aware of any amendments to the procedure that may be lurking around. Thy TAs will aid you in understanding why such changes were made. However, as always, if something remains unclear, thou must ASK!

   - Make sure all equipment is clean before starting.

   - Take your time and do not rush to get out of lab: Patience, young chemista, patience. Remember, you scheduled lab expecting it to take three hours. Make sure that you take good observations and ask thoughtful questions during the experiment. Getting out of lab early is a bonus. Getting out of lab early, performing the procedure correctly, and understanding everything you have done is superior.
3. To receive a good grade on your lab write ups:

- Present data clearly and concisely.
- Discuss results thoroughly and accurately: It is highly recommended to include reaction mechanisms to show product formation. Also, discuss your yield compared to the theoretical yield.
- If applicable, discuss unexpected side-products: Ask yourself, what complications led to the formation of these evil side-products? Conjecture on possible explanations and refer to observations to give insight into possible errors.

Section III – Studying: The Student Enters His Dungeon

This section will teach thee how to make the most out of thy efforts to study the material. Just as a knight must hone his skills with hours of swordplay, a young chemist must refine his skills jousting with problems everyday. Solving problems is the key to this course. Studying instills one with the ability to duel any problem.

1. Plan your attack to study for upcoming exams:

- Start studying EARLY: Young chemista, don’t be naïve and think that you can do well studying two nights before the exam. Too much material is covered to be able to process it all in two nights. Doing so does not give you the opportunity to ask questions during class or office hours. If other exams fall on the same day as your organic chemistry test, you’ll have time to study for your other tests.

2. Reviewing for the exam:

- Re-read chapters until the material makes sense.
- Create a reaction sheet (or flashcards) to help you remember reaction mechanisms.
- Look over class notes: Do not take class notes for granted! Some professors will include topics not covered by the book into their lectures. At times, these topics will end up on your exam.
- Keep your notes next to you while you re-read the chapter: Young chemista, use all your resources to clarify aspects of the material on your own. Using multiple sources gives one a variety of perspectives on the material. Notes may clarify aspects of the literature (or vice-versa).
• Do as many problems as you can: Don’t limit yourself to the recommended problems; do as many as you can from the end of the chapter.

   *The more practice you get, the more confident you’ll become.*

• Don’t rely too much on the solutions manual: Do not fret if you cannot solve a problem, the best of minds have encountered similar obstacles. If you get stuck, look through the book and your notes to help you. If you give up, work with the solution to help you understand the problem. Although the great ones had their troubles, what made them great is that they never gave up.

   *Take note of the problem that stumped you and ask your professor about it.*

• Attend Workshop as often as possible: Workshop leaders were just like you at one point. Therefore, they can be very helpful and will provide you direction throughout your travels. Also, workshop problems sometimes end up on the test.

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**Section IV – Tests: A Joust of Wits**

This section will teach thee how to make the most out of thy efforts of studying to bring the great beast to its knees. Thou must remain focused, diligent, and resilient. The beast will not go down easy, and he has also come prepared to do battle. But thou hast the advantage! Thou hast been shown the way, and thou has sharpened thy skills with countless hours of practice. Do not falter! Do not fail!

1. Doing well on the test starts before you actually take it:

   • Review your reaction pages (or flashcards) but do not cram!
   • Young chemista, get a good night’s rest before the exam: *Many have fallen due to fatigue and lack of vigor. The last thing you want is to drift off during the test or rush to finish it to go back to your room and sleep.*
   • Eat a healthy breakfast.

   *Take a bottle of water with you to the test; it’ll cool you down if you heat up.*

   2. The gauntlet awaits you, as does glory. *Carpe diem!*
• Apply what you know: *You’ve been studying day after day for this test, you know the material, apply it!*
• If you come across a problem that throws thee off guard, follow these steps, young chemista:

1. Breathe deeply and relax.
2. Read the question again. Make sure you understand what the question is asking for.
3. Try to eliminate unnecessary information (sometimes professors will include such things to confuse you).
4. Work with what you know and plan your attack around that.

*If problems continue:*

5. Ask professor for clarification.
6. Think back to the relevant chapters. What reactions did you learn in those chapters? This may help you recognize the nature of the problem.

*If all else fails:*

7. If you can’t solve it just move on. You have other problems to solve. Solving a different problem can boost your confidence and may help you recollect how to solve the problem that stumped you.

• Be aware of the time and pace yourself accordingly.
• Most importantly, relax!

3. After the test, the time is yours!

• Relax and do something fun.
• Don’t think about the test: *Don’t look through the textbook to see if you got something wrong or right. This may create false hopes or expectations.*
• Don’t let the test dictate your mood.

4. Getting your test back.

• Don’t ignore your test. There is still more to learn!: *Understand your mistakes and redo the problems that you missed because they may end up on the final exam.*
• Don’t let your grade dictate your future performances: *The great ones continued to study hard regardless of how they did. Always try to do better, young chemista.*