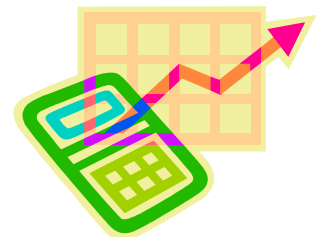


How to Receive an "A" in Actuarial Science Courses *Statistics Theory 1 & 2, Derivative Markets & Pricing*

1. **Do not get behind.** Everything builds on itself a lot and fast.
2. **Why vs. how.** Learn why a problem is solved the way it is rather than focusing on how it was done. Completely understand the theory/concept of why a step was taken and not just what the step is.
3. **Practice.** Practice a lot of problems to get exposure and rework them until you are confident with the theory behind the problems.
4. **Study Partner.** Study with others, preferably 1-2 study partners – more than that tends to be inefficient. This allows you to focus on your work, and if you get completely stuck (which will happen) the other person may know it or you can work together to figure out the theory/concept.
5. **Notes.** Make sure to write everything the teacher does. If you do not take in what is said and are merely writing what the teacher did, then you will need to rework/rewrite notes and understand what the professor was teaching (*this can take longer than the lecture itself was).
6. **Textbooks.** This can depend on the class and teacher. For actuarial classes, textbooks are a must for concepts and practice problems (i.e. Stat Theory 1-2, Theory of Interest, Intro to Derivative Markets, and Derivative Pricing). For Managerial Accounting, read the textbook, as well as make flashcards.
7. **Professors.** Teachers are very helpful – visit them during office hours and develop a relationship with them.
8. **Concepts vs. Steps.** If the actual concept is not grasped, it doesn't matter how many practice problems you do; the professor won't give you exact replicas of the problems assigned. Course of action: read and reread the chapters. It might not be the most exciting thing to read a math textbook but sometimes you have no choice.
9. **Stat Theory 1-2.** Copy down everything the professor writes on the board as test material is likely to come from notes and worked problems in the lecture (and textbook). Applied concepts from the notes/problems as well as proofs are also probable test material.
10. **Derivate Markets/Pricing.** Completely understand basics of what a call/put is as everything builds off this. Read the textbook and apply it to problems afterward.



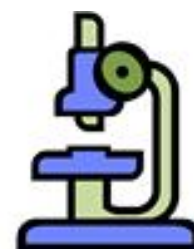
How to Receive an “A” in Astronomy

1. **Read the concepts to be discussed BEFORE you attend to class.** Your ability to comprehend the material will be easier if you have familiarized yourself with the material in advance. Even if you did not understand the material when you first read, hearing it again in class will assist in final comprehension of the concept.
2. **Don't try to write down everything your professor says word for word.** Jot down the main significant points, formulas, broad concepts, etc. You can find the minor concepts in your textbook for further explanation.
3. **Use diagrams to show what you know.** When learning about certain concepts, drawing diagrams of what is going on gives you a better idea of why and how something happens. This is a great way to test yourself on how well you know something. If you can explain it in your own words, then you should feel confident about your abilities. This is especially useful for learning about cycles and patterns of events, like eclipses and the life cycle of a star.
4. **Go to class every single day.** You will never be able to make up for lost lecture time. Being able to hear and react to the professor's explanation of the material can assist greatly in understand the concepts. You can't get voice inflections and additional information provided from a power point.
5. **Manage your time.** Astronomy is a course where you must be involved in the material every day. Whether it is re-reading a section of the textbook, re-copying notes, participating in a tutoring/SI session, make flashcards, etc. this allows you brain to be in Astronomy mode.
6. **Make flashcards for vocabulary words and general concepts.** The can be especially useful with understanding types of planets and the parts of the atmosphere. Repetition is the key. The more you familiarize yourself with the content you will be able to identify it on a test.
7. **Use the tools given to you.** If you have Course Compass available, use it! It's a great tool complete with interactive tutorials and flashcards. These items reflect what is in the book and can be a great asset when studying for a test or working on a concept you don't understand. Don't have Course Compass? Search online for astronomy help. There are plenty of sites, like Encarta, that have astronomical loads of information about this subject.
8. **Form a study group** with other students who are as interested in succeeding in the class. Find those students who attend class every day, take notes in class every day, and who have set high academic goals. These are the students to study with – like students breed like results.
9. Visit the **SARC website** at www.sarc.sdes.ucf.edu for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.



How to Receive an "A" in Biology

1. **Make flashcards** for vocabulary words and formulas. Repetition is the key. The more you familiarize yourself with the content you will be able to identify it on a test.
2. **Read the concepts to be discussed BEFORE you attend to class.** Your ability to comprehend the material will be easier if you have familiarized yourself with the material in advance. Even if you did not understand the material when you first read, hearing it again in class will assist in final comprehension of the concept.
3. **Don't try to write down everything your professor says word for word.** Jot down the main significant points, formulas, broad concepts, etc. You can find the minor concepts in your textbook for further explanation.
4. **Look over you notes from the previous lectures once a day.** Biology concepts build on one another. Having a strong sense of the previous day's lectures notes can assist in understanding next steps.
5. **Do not procrastinate chapter reading.** This is one class where you must read the chapters, highlight key concepts, take notes on what you read, and combine textbook information with class notes. You don't want to be reading four chapters in Biology the night before a test.
6. **Stop and ask the professor if you don't understand a concept that is being explained in class.** If it doesn't make sense now, chances are good it will not make sense tomorrow either. Sometimes you just need to hear the material again.
7. **Form a study group** with other students who are as interested in succeeding in the class. Find those students who attend class every day, take notes in class every day, and who have set high academic goals. These are the students to study with – like students breed like results.
8. **Mark or highlight** concepts that are giving you trouble so you can have a reference point in asking the professor or a tutor/SI leader for further clarification.
9. **Make reading the textbook, completing homework, re-writing your notes, and SARC a part of your daily academic routine.**
10. Visit the **SARC website** at www.sarc.sdes.ucf.edu for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.



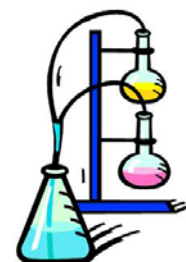
How to Receive an “A” in Biology II

1. **Read chapters ahead of time.** This allows you to enter class with some background in the topic so the professor’s lecture is easier to follow. Also, if you had any questions from the textbook and the professor does not clarify it in class when discussing that same chapter, you are prepared for what you need to ask to fully comprehend the material.
2. **Review lecture notes** after class and then **make note cards** that day. The reason for this is that the material will still be fresh in your mind since you just covered it in class that day. This is better than not looking at your notes again for days or even weeks because then they may not make as much sense anymore. So, constant review and repetition!
3. **Draw visual diagrams to understand concepts.** These can help you see the relationships between different concepts.
4. **Learn etymology of words.** Most words are comprised of roots that define the word. (Example: hetero = different, homo = same, -coel = cavity)
5. **When reading your textbook, add notes to your lecture notes.** This way, you have complete notes and they are all in the same place.
6. **Use supplemental sources** (e.g. Youtube videos to understand concepts you are struggling with).
7. **Review all notes every day to keep material fresh.** This will help store it in your long-term memory.
8. Visit the **SARC website** at www.sarc.sdes.ucf.edu for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.



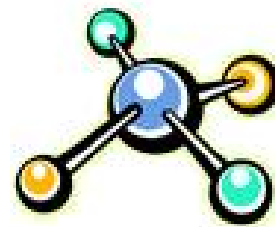
How to Receive an "A" in Chemistry I

1. **Make flashcards** for polyatomic ions, solubility rules, strong acids/bases, and conversion factors. Keep these flashcards with you at all times so you can have a quick access for a quick review.
2. **Read the concepts to be discussed BEFORE you attend to class.** Your ability to comprehend the material will be easier if you have familiarized yourself with the material in advance. Even if you did not understand the material when you first read, hearing it again in class will assist in final comprehension of the concept.
3. **Don't try to write down everything your professor says word for word.** Jot down the main significant points, formulas, broad concepts, etc. You can find the minor concepts in your textbook for further explanation.
4. **Get the solutions manual.** The solution manual will assist you in identifying the correct steps needed to solve problems. Knowing the steps involved are just as critical as knowing the concepts involved.
5. **Look over you notes from the previous lectures once a day.** Chemistry concepts build on one another. Having a strong sense of the previous day's lectures notes can assist in understanding next steps.
6. **Do not procrastinate chapter reading.** This is one class where you must read the chapters, highlight key concepts, take notes on what you read, and combine textbook information with class notes. You don't want to be reading four chapters in Chemistry the night before a test.
7. **Stop and ask the professor if you don't understand a concept that is being explained in class.** If it doesn't make sense now, chances are good it will not make sense tomorrow either. Sometimes you just need to hear the material again.
8. **Complete two problems from the back of the chapter, which correspond to the day's lecture.** Being able to apply the concept introduced in the lecture to an actual problem (potential test question) can allow you to test your comprehension of the material.
9. **Form a study group** with other students who are as interested in succeeding in the class. Find those students who attend class every day, take notes in class every day, and who have set high academic goals. These are the students to study with – like students breed like results.
10. Visit the **SARC website** at www.sarc.sdes.ucf.edu for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.



How to Receive an "A" in Chemistry II

- 1. If available, print out lecture notes BEFORE class.** Familiarize yourself with the concepts to be presented in class ahead of time so when the concept is first introduced, you will already have some sense of its relevance.
- 2. Sit close to the front of the class.** You want to be able to see the board/screen and be able to hear the professor. Also **visit your professor during office hours.** This will allow you to have some one-on-one time to clarify the material and to ask for other advice on success in the course.
- 3. Go to class every single day.** You will never be able to make up for lost lecture time. Being able to hear and react to the professor's explanation of the material can assist greatly in understanding the concepts. You can't get voice inflections and additional information provided from a power point.
- 4. Manage your time.** Chemistry is a course where you must be involved in the material every day. Whether it is re-reading a section of the textbook, re-copying notes, participating in a tutoring/SI session, make flashcards, etc. this allows you brain to be in Chemistry mode.
- 5. Make review sheets.** Go over your notes each day and make a sheet with key points of the day's lecture. Spending just 10 minutes making a quick review sheet will help you be prepared to study for the next test.
- 6. Read the concepts to be discussed BEFORE you attend to class.** Your ability to comprehend the material will be easier if you have familiarized yourself with the material in advance. Even if you did not understand the material when you first read, hearing it again in class will assist in final comprehension of the concept.
- 7. Complete worked out problems found throughout the chapters in the textbook.** Workout sample problems in the chapter as you read. The answers are presented to you. Become familiar with the steps involved in solving the problems. If there is a step you do not understand, mark it and attend a SARC peer tutoring/SI session or ask your professor during their office hours.
- 8. Form a study group** with other students who are as interested in succeeding in the class. Find those students who attend class every day, take notes in class every day, and who have set high academic goals. These are the students to study with – like students breed like results.
9. Visit the **SARC website at www.sarc.sdes.ucf.edu** for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.



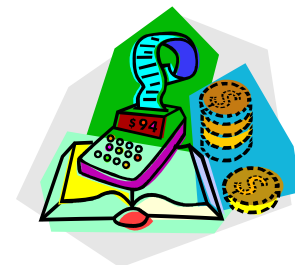
How to Receive an “A” in Human Physiology

1. **Have confidence and think positive.** Have a positive outlook regarding your success in the course. It will assist you in becoming and staying motivated and excited for studying human physiology.
2. **Go to class every single day.** You will never be able to make up for lost lecture time. Being able to hear and react to the professor’s explanation of the material can assist greatly in understanding the concepts. You can’t get voice inflections and additional information provided from a power point.
3. **Make flashcards** for vocabulary words and formulas. Repetition is the key. The more you familiarize yourself with the content you will be able to identify it on a test. Make flashcards for the hormones and their specific organs and their functions. Include color because physiology is all about color and flash (sight and signal transduction).
4. **Look over you notes from the previous lectures once a day.** Concepts in human physiology build on one another. Having a strong sense of the previous day’s lectures notes can assist in understanding next steps.
5. **Form a study group** with other students who are as interested in succeeding in the class. Find those students who attend class every day, take notes in class every day, and who have set high academic goals. These are the students to study with – like students breed like results.
6. **Stop and ask the professor if you don’t understand a concept that is being explained in class.** If it doesn’t make sense now, chances are good it will not make sense tomorrow either. Sometimes you just need to hear the material again.
7. **If available, print out lecture notes BEFORE class.** Familiarize yourself with the concepts to be presented in class ahead of time so when the concept is first introduced, you will already have some sense of its relevance. Print notes from WebCT ahead of time and read them before coming to class. You will thank yourself, especially with **signal transduction**.
8. **Do not procrastinate chapter reading.** This is one class where you must read the chapters, highlight key concepts, take notes on what you read, and combine textbook information with class notes. You don’t want to be reading four chapters in Biology the night before a test.
9. Visit the **SARC website** at www.sarc.sdes.ucf.edu for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.



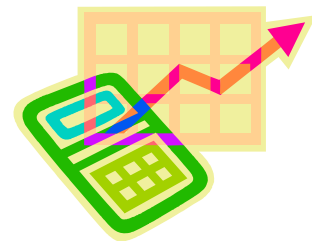
How to Receive an "A" in Managerial Accounting

1. **Manage your time.** Accounting is a course where you must be involved in the material every day. Whether it is re-reading a section of the textbook, re-copying notes, participating in a tutoring/SI session, make flashcards, etc. this allows you brain to be in Accounting mode.
2. **Review homework problems.** It is very important that you are able to do all of the homework problems your professor assigns. Usually there are similar questions on the test which are similar to the problems assigned for homework. You should repeat the homework problems until you can do them like second nature and it will benefit you immensely for the test.
3. **Print out the notes for class.** If you come to class without the notes printed out it will be very difficult to pay attention to what the professor is saying because you will have to be copying everything down. If you print out the notes before class it will help you keep up with the professor as well as organize the lecture. You can spend more time listening and less time copying!
4. **Focus on sections of the book.** The book can sometimes get overwhelming with all of the examples it provides. It can be useful to break up the book by sections in accordance with the notes provided in lectures. This helps break up the text and prevent you from being overwhelmed by all of the information and examples.
5. **Read the chapter you will be reviewing in class the night before.** This helps because when the professor goes over the material in class the next day the information is familiar to you and the professor can then clear up any confusion you may have been having about a particular section.
6. **Form a study group** with other students who are as interested in succeeding in the class. Find those students who attend class every day, take notes in class every day, and who have set high academic goals. These are the students to study with – like students breed like results.
7. Visit the **SARC website at www.sarc.sdes.ucf.edu** for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.
8. **Make review sheets.** Go over your notes each day and make a sheet with key points of the day's lecture. Spending just 10 minutes making a quick review sheet will help you be prepared to study for the next test.



How to Receive an "A" in Mathematics *Pre-Calculus, Calculus & Differential Equations*

1. **Do proofs** to understand concepts and derivations.
2. **Work out problems and practice practice practice!** Math is about repetition.
3. **Use graphs** as a visual aid for conceptual enhancement. When you graph problems, you can see how your equation looks.
4. **Make flashcards** for the formulas you need to know.
5. Get into **study groups** after looking over material.
6. **Do not procrastinate.** Give yourself time to study; don't wait until the last minute.
7. **Work on timing** when problem solving to ensure sufficient time for completion (on test).
8. **Don't memorize;** understand the formulas you have to use.
9. **Go to professor's office hours.** He/she is there to help.
10. **Use all the materials you can,** including the textbook and math software (my math labs) as your base to study off of.
11. Visit the **SARC website** at www.sarc.sdes.ucf.edu for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.



How to Receive an "A" in Organic Chemistry

- 1. Go to class every single day.** You will never be able to make up for lost lecture time. Being able to hear and react to the professor's explanation of the material can assist greatly in understanding the concepts. You can't get voice inflections and additional information provided from a power point.
- 2. Manage your time.** Organic Chemistry is a course where you must be involved in the material every day. Whether it is re-reading a section of the textbook, re-copying notes, participating in a tutoring/SI session, make flashcards, etc. this allows your brain to be in Organic Chemistry mode.
- 3. Make review sheets.** Go over your notes each day and make a sheet with key points of the day's lecture. Spending just 10 minutes making a quick review sheet will help you be prepared to study for the next test.
- 4. Read the concepts to be discussed BEFORE you attend to class.** Your ability to comprehend the material will be easier if you have familiarized yourself with the material in advance. Even if you did not understand the material when you first read, hearing it again in class will assist in final comprehension of the concept.
- 5. Complete worked out problems found throughout the chapters in the textbook.** Workout sample problems in the chapter as you read. The answers are presented to you. Become familiar with the steps involved in solving the problems. If there is a step you do not understand, mark it and attend a SARC peer tutoring/SI session or ask your professor during their office hours.
- 6. It's all in the name!** The great thing about Organic Chemistry is that many names, give you great clues.

Ex. dehydrohalogenation	
de- remove from so... the process of
hydro- hydrogen	removing a hydrogen and
halo- halogen	halogen from a compound!
-ation- action or process	
- 7. Discover your method for comprehension.** If flash cards are not your cup of tea, then don't use them. Try various methods including, study sheets, formula cards, create mnemonics, etc. The professor does not test you on HOW you remembered the material, as long as you do remember the material. You need to be able to explain or defend your answers to homework/test problems.
- 8. Visit the SARC website at www.sarc.sdes.ucf.edu** for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.



How to Receive an "A" in Statistics

- 1. Go to class every single day.** You will never be able to make up for lost lecture time. Being able to hear and react to the professor's explanation of the material can assist greatly in understanding the concepts. You can't get voice inflections and additional information provided from a power point.
- 2. Take class notes every single day.** Concepts might seem understandable in class but that can change when a couple of hours or days later. Take good notes, especially by incorporating step-by-step examples, will serve as a great assistance when completing homework or studying for a test.
- 3. Do the Homework.** Homework problems serve as practice and drills. Use homework problems as a guide of what you understand and where you still need some further clarification. Also, the more you drill similar problems the faster you will be able to solve them, leaving more time on the test to check your answers.
- 4. Read the concepts to be discussed BEFORE you attend to class.** Your ability to comprehend the material will be easier if you have familiarized yourself with the material in advance. Even if you did not understand the material when you first read, hearing it again in class will assist in final comprehension of the concept.
- 5. Stop and ask the professor if you don't understand a concept that is being explained in class.** If it doesn't make sense now, chances are good it will not make sense tomorrow either. Sometimes you just need to hear the material again.
- 6. Manage your time.** Statistics is a course where you must be involved in the material every day. Whether it is re-reading a section of the textbook, re-copying notes, participating in a tutoring/SI session, make flashcards, etc. this allows you brain to be in Statistics mode.
- 7. Form a study group** with other students who are as interested in succeeding in the class. Find those students who attend class every day, take notes in class every day, and who have set high academic goals. These are the students to study with – like students breed like results.
- 8. Always use the calculator that you are going to use on the test for any practice problems.** All calculators might seem the same, but you do not want to waste precious time during the exam trying to figure out which buttons do what.
- 9. Use flashcards.** Write the concept or problem on the front of the card and steps to solve it on the back.
- 10. Get Visual.** Draw flowcharts to help keep the formulas in check, and draw and label graphs for every problem and equation.
- 11. Look for patterns when problem-solving.** When a pattern is discovered, write it down as a rule of thumb.

12. **Identify variables in word problems.** Box, underline, write down important variables such as the probabilities, number of people tested, total number, etc.

13. **List out steps of problem.** Put down, in order, what you have to do to get to the answer. You can then refer back to the list you created for subsequent problems.

14. Visit the **SARC website** at www.sarc.sdes.ucf.edu for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.

Student Academic Resource Center
Division of Student Learning and Academic Success



How to Receive an “A” in Statistics for Engineers

1. **Familiarize yourself with the different types of questions so you are able to identify each type of problem.** Underline or highlight key words, phrases, or symbols that help identify each problem. Be sure to read each problem carefully and answer with exactly what the question is asking for.
2. **Create step by step systematic approaches to solving each type of problem.** The steps must be generalized enough so that they can be applied to any problem but specific enough that they apply to a specific type of problem. Use this system to solve problems until it is cemented into your head.
3. **Catalogue** the textbook.
4. **Get separate problems from outside the book and include them in your notes.** The more practice and experience you have with different problems, the more you understand the material.
5. **Find various definitions for distributions.** Eventually, one or combination of a few will help you better understand conceptual problems.
6. **Be Visual.** When working with problems that use phrases like “more than” or “less than” draw a number line and shade. Also, draw z-score and t-score curves and shade the regions you will be testing for. This will make it easier to visualize and understand the problem.
7. **Check to see if charts are cumulative.** Never assume, always double check.
8. Visit the **SARC website at www.sarc.sdes.ucf.edu** for the semester peer tutoring, supplemental instruction (SI), and academic success workshop series schedule.

