**Math Placement Information**

**Message 1**

Note: Every College or University has a different mathematics placement process. It is worth your time to investigate this BEFORE you arrive for your summer orientation. It is likely you will be required to take some type of mathematics placement test before you register for your first semester of classes and you should be ready!

**Steps for Math Placement at SDSU:**

1. You are automatically placed if you already have college credit.
   1. Take and pass the AP exam for Calculus
   2. Take a CLEP (College Level Examination Program) exam to earn college credit for any course College Algebra or higher, except Statistics
   3. Take a dual credit course to get college credit for a class you take in high school (except Statistics) (CAUTION!)
2. ACT Math Subscore
   1. If your Math Subscore is 25 or higher, you may take Math 102 (College Algebra), Math 103 (Quantitative Literacy), Math 115 (Precalculus), Math 120 (Trigonometry), Math 121 (Survey of Calculus) or Stat 281 (Intro to Statistics).
   2. If you wish to take Math 123 (Calculus I), you must take the COMPASS Exam
   3. If your ACT Math Subscore is less than 25, you are placed based on your Math Index
3. Your Math Index is a combination of your ACT Math Subscore and your High School GPA.
4. Based on your Math Index, you will be placed in a course in the range from Pre-College Algebra to PreCalculus.
5. If you want to take Calculus, you’ll take the Compass Exam.
6. ACCUPLACER Exam (given during orientation)
   1. No calculator is allowed.
   2. Tests your Prealgebra, Algebra, Geometry and Trigonometry skills
   3. Can be used to challenge your placement based on the Math Index
7. COMPASS Exam (given during orientation) to students with ACT of 25 and higher.
   1. Calculator is allowed.
   2. Tests your Prealgebra, Algebra, Geometry and Trigonometry skills
   3. Must be taken if you plan to take Calculus

**More Details to Come!**

**Math Placement Information**

**Message 2**

**Why is placement so important?**

Comment from a Calculus student who *failed* Calculus I last year and is *repeating it* this year:

“I felt sure that I had seen all the algebra and trig topics I would need for Calculus, so I didn’t listen to the recommendations of my professor. I found out I hadn’t seen them all and the problems I needed to do were HARDER than the ones I remembered from High School.”

Taking a course for which you aren’t prepared often means that you fail that course and must repeat it. The placement process exists to help you determine which course you are prepared to take.

Even if you need a higher level class for your degree, you save time and money by taking and passing a class for which you are prepared and then being better prepared for the next class.

However, being placed in a course that is too easy means your path to degree completion is longer!

**Therefore, take the ACT and the placement exam seriously. Ensure that these exams reflect your TRUE ability and not whether you got enough sleep the night before the test.**

Be aware that the placement process is not perfect. Students do end up in classes for which they aren’t prepared and some take classes that were too easy for them.

There are many factors that affect your performance in a class that can’t be determined by a test. Your desire to succeed, your willingness to work, the amount of time and effort you commit to the course, and outside influences during the semester all affect your chances of success.

**It is important that you learn, not merely survive, the mathematics you study in high school. You should learn with the goal of retaining and using this mathematics again in your college courses.**

**Your High School GPA is an indicator of the time and focused effort you spend on your courses. A good work ethic is required in order to successful in an academic environment. Work on increasing your GPA by learning what your teachers are asking you to learn!**

**Math Placement Information**

**Message 3**

**Step 1 of the Placement Process: Earned College Credit**

**AP Credit for Calculus I and/or II:**

If you take and earn a 3 or more on the Advanced Placement AB Calculus Exam, you get College Credit for Calculus I and are automatically placed into Calculus II. (If you pass the BC Exam, you automatically place into Calculus III)

Caution: A score of 3 is an indication that possibly you are not adequately prepared for Calculus II. Our department recommends that you consider taking Calculus I instead. If you choose to take Calculus I, DO NOT COMPLETE THE PAPERWORK NECESSARY TO ADD THE AP CREDIT TO YOUR TRANSCRIPT! For programs that require Calculus, Calculus I is considered your first freshman math course, so taking Calculus I does not put you behind in your program.

For some majors, Calculus I may be all the mathematics required, and you will not have to take any mathematics in college (though you might want to just for fun!).

Note: You may not know the result of your AP exam by the time you arrive at orientation. Discuss this with your advisor at that time.

Note: At SDSU, if you take and pass the AP exam for Statistics, you receive credit for Stat 281, but this will not affect your placement for other math courses.

**Earning College Credit by Examination:**

It is possible to earn college credit for work you have done in high school by taking and passing a CLEP (College Level Examination Program) exam. For information about the CLEP at SDSU, go to [http://.sdstate.edu/aea/examination/clep](http://.sdstate.edu/aea/examination/clep%20) . To see which exams are accepted for course credit at SDSU, click in the right column under computer based or paper based scores.

To learn more about the exams themselves: <http://www.collegeboard.com/student/testing/clep/about.html>

Note: This exam is not an easy way out of taking a math class. The problems require algebraic skill, ability to apply algebra to real life, and creative thought processes.

**Dual Credit:**

Some high schools offer a dual-credit course in which you earn college credit for the courses taken in High School. A Caution: Be very diligent in these classes and do more than the “minimum” required to pass. Our experience has been that a passing grade in a dual-credit course does not always mean the student is prepared for the next Math course.

**Math Placement Information**

**Message 4**

**Step 2 and 3 of the Placement Process**

**ACT Math Subscore, the Math Index and the ACCUPLACER or COMPASS Exam**

**The ACT**

Math placement at SDSU is first dependent upon your ACT score.

**Take the ACT seriously** to ensure it measures your true ability!

ACT 25 or Higher

Take: Math 102 (College Algebra), Math 103 (Quantitative Literacy), Math 115 (Precalculus), Math 120 (Trigonometry),

Math 121/121L (Survey of Calculus) or Stat 281 (Intro to Statistics)

**The Math Index**

If you earn a 24 or below on your ACT Math Subscore, you are placed based on your Math Index. To find your Math Index, multiply your GPA (out of 4.0) by 250 and your ACT Math Subscore by 17 and add. This is the number that will determine your mathematics placement at SDSU.

**The Accuplacer Exam**

Some students take the ACCUPLACER exam when they come to SDSU for summer orientation. Other schools might use COMPASS, ACCUPLACER or some other test. **Take this test seriously!** Review your math before you go to orientation.

You may take the ACCUPLACER exam if you are placed in Math 095 or 102 based on your Math Index and believe you should be placed higher. You get **ONE** chance and pay a small fee to take the exam.

The ACCUPACER Exam does not allow you to use a calculator. The test is adaptive, which means the test is different for everyone, and the problems you get are determined by the problems you get correct or incorrect throughout the test. If you blow off the first few problems, you jump to a lower category and are more likely to be placed lower.

Sample questions can be found here:

<http://professionals.collegeboard.com/profdownload/accuplacer-sample-questions-for-students.pdf?CSRF=F04I-LKB2-18EO-LYR6-W4NL-6LZ5-TH3X-4JCG> and <http://accuplacer.collegeboard.org/students/accuplacer-tests>

**The COMPASS Exam**

You MUST take the COMPASS exam if would like to take Calculus (unless you have an appropriate AP Calculus score). Your score will determine whether you take Precalculus, Calculus I, or Calculus I with an additional required lab. **Take this test seriously!** Review your math before you go to orientation.

The COMPASS Exam allows a calculator and is also adaptive. The test is different for everyone and the problems you get are determined by the problems you get correct or incorrect throughout the test. If you blow off the first few problems, you jump to a lower category and are more likely to be placed lower.

Sample Questions for the Compass exam can be found here: <http://www.act.org/compass/sample/index.html>

At the bottom of this page under “More Sample Questions” you’ll find .pdf documents that include a list of topics covered in each category of the exam. To place into **Math 123** (Calculus I) you must be able to do almost all of the problems in the “college algebra” and the “trigonometry” categories.

**Math Placement Information**

**Message 5**

**Choosing a Class**

**Part 1**

**Courses offered at SDSU that cover material you could learn in High School (for free!)**

**Math 099/095 Pre-college Algebra**

You pay extra for these classes, and they don’t count towards the 120 credits required to graduate.

**Math 102 College Algebra**

This class counts towards your math requirement for graduation. CLEP exam is available.

**Math 115 PreCalculus**

This is a 5-credit class. It counts towards your math requirement for graduation and is a prerequisite for Calculus. CLEP exam is available.

**Math 120 Trigonometry**

This counts towards your math requirement, but does not prepare you for Calculus. NO CLEP is available.

**Math 123 Calculus**

This is a 4-credit class and it counts towards your math requirement for graduation. You must be placed here or have completed earned college credit for PreCalculus. CLEP exam is available. AP course is available in some High Schools.

**Math123L Calculus Lab**

This is a 1-credit course required for students who are placed in and are taking Math123, but whose COMPASS scores indicates a weakness in PreCalculus skills. This course is taken along with Math 123 and lets you strengthen your Pre-Calculus skills without forcing you take the full PreCalculus course.

**Stat 281 Introduction to Statistics**

This class satisfies your math requirement for graduation and is required in some majors. AP course is available in some High Schools.

**Math Placement Information**

**Message 6**

**Choosing a Class**

**Part 2**

**You *cannot* take a Math class *above* your placement.**

**You *can* take one *below* your placement.**

**If you are worried about your placement being too high, choose a lower level class:**

However,once you take a math class, you must follow the path from that class to your final Math class. For example, if you place in Math 102, but choose to take Math 095, you must finish Math 095 before you can take Math 102.

**Choose the Highest Level for which you are placed and you are comfortable:**

If you are unsure of your major, choose a class at the highest level for which you are placed. Many students who change into a major for which Calculus is required are dismayed to find that College Algebra does not satisfy the prerequisites for Calculus, and they are required to take the 5-credit PreCalculus course before they can take Calculus. If they were placed in this course and had taken it to start, they would have saved some time and money.

**Choosing Calculus I?**

If you are taking Calculus I, you will be taking a “Gateway” exam ~~to help you~~ ensure that you are truly prepared for this course. This is not a placement exam, and you are not required to follow the recommendations based on this test, **but** you should consider them seriously. Information can be found here: <http://sdstate.edu/mathstat/for-students/gatewayexam.cfm>

**What is required in your major?**

The on-line catalog for SDSU can be found here: <http://catalog.sdstate.edu/>

Click Majors and Minors in the Left Column to see what courses are required. If no specific Math course is listed, Math 102, Stat 281, or any higher Math class will satisfy the math graduation requirement (SGR Goal 5).

Here is the Path to your final “math destination.” Your initial placement determines how many courses you must take to achieve your math goal. Where will you start?

Example: If you place in Math 095 and hope to take Calculus, it will take you 3 semesters (1 ½ years) before you are able to take Calculus.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Courses needed to Satisfy a General Math Requirement:**  Math 095  Math 102 | **Courses needed to get to Calculus:**  Math 095  Math 102  Math 115  Math 123 | **Course needed to get to Statistics**  Math 095  Math 102  Stat 281 | **Courses needed to get to Survey of Calculus**  Math 095  Math 102  Math 121 | **Courses needed to get to Chemistry**  Math 095  Chem 106 and Math102  OR  Math 095  Math 102  Chem 112 |

**Once you’re at SDSU: Things you may not know**

**Message 7**

1. **All 3 credit college classes expect you to spend at least 9 hours per week on the class work (including class attendance) and some require more!!!**
2. **College is a full time job!!!**
3. **Taking Math 095 (Pre-college Algebra)?**

You must attend class! This is NOT an on-line class. The best part of this class is the personalized instruction offered to you while in the classroom. **Math 095 includes**:

* 2 hours scheduled class time: instructors available to answer questions.
* 4 hours unscheduled time in the lab: instructors available to answer questions.
* 3 additional hours on your own

By taking and passing quizzes, you progress through the class.

You can finish early or take an extra semester, if needed. If you don’t finish by the end of a semester, but participate fully in the class, then the next semester, you begin the course where you left off!

Not surprisingly, statistical analysis of success in this course indicates that the more effort a student puts into the course, the more likely they are to finish!

1. First semester freshmen may be taking regular courses (Stat 281, Math 102, or Math 103) along with co-requisite courses (091, 092, or 093) that are designed to help you be successful in the regular class. Take these co-requisite courses seriously! Students tell us these classes have made a huge difference in how well they did in the regular class!
2. **Calculators are often not permitted in freshman math classes! And you will not be allowed to use notes or notecards while taking tests!**

* Pre-college Algebra: No calculators allowed for the first part of the course; no graphing calculators for the last part of the course (scientific calculators only).
* College Algebra and Survey of Calculus: No graphing calculators allowed (scientific calculators only).,
* PreCalculus and standard Calculus courses: No calculators allowed on tests (except in the Honors class).

**Math Placement Information**

**Message 8**

**Life changes.**

**You might think now that you will not go to college.**

**Be smart now so that you don’t limit your options later.**

**Take Mathematics courses every year in High School;** take them seriously, and understand that the ACT, College Placement Examinations and your college professors will expect that you have ***retained and can use*** your High School mathematics knowledge.

When getting ready to go to college, **know the placement process** and be ready to take a placement test during orientation.

**Know what Mathematics courses are required** for the Majors in which you are interested.  Even if your major doesn’t seem to be dependent upon mathematics, every degree requires at least one college level mathematics class.  You can get prepared for these courses in high school, or you can pay extra to get prepared for them in college.

Your success in College is largely dependent upon **your desire to learn, willingness to work, and time committed to learning.**