



MATH PHYSICAL EDUCATION

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Advising Tips

As Registration time approaches, here are some advising tips that may help as you carefully map out your course selections:

- If you are required to take one or more developmental math courses, don't wait. Begin these classes as soon as possible. Many students need several semesters to complete their math sequence.
- Make sure you register for the right course. MAT 140 – Survey of Mathematics, MAT 141 – Mathematical Concepts I, & MAT 171 – Precalculus Algebra are our staple college transfer courses. Consult with your advisor or refer to the CFCC catalog for help in selecting the appropriate course for your major.
- Most of our math classes require the use of a calculator. A TI-83/84 is required for the majority of the college transfer classes while an inexpensive scientific calculator can be used for the developmental/technical courses. The cost of the TI-83/84 calculator is about \$95.
- Most math classes are taught using MML. MML is an interactive website where you can: view digital lectures, do homework or quizzes assigned by your instructor, self-test and work through practice exercises with step-by-step help and access an online/telephone tutoring service. Your new textbook will be bundled with an access code if purchased through the CFCC bookstore. If you purchase a used book, you will need to purchase the access code separately. It is available at the CFCC bookstore or can be purchased online during the registration process using Visa, MasterCard, or an American express credit card. Cost is about \$75.
- All college transfer classes, except MAT 271 & 272, require that you register for the accompanying lab. For example, if you register for MAT 171 DY1, you must also register for MAT 171A DY1.
- CFCC has a Learning Lab in the LRC and an open Math Lab on the 6th floor of the McLeod building. These resources are free to CFCC students.

Some Things to Consider when Registering for a Math Class

According to research, there are three main learning modalities related to the learning of mathematics. These are auditory, visual, and tactile/kinesthetic. Very brief discussions follow. **Auditory** suggests that the student should (1) sit near the front of the classroom to clearly hear the instructor without auditory distractions; (2) record all lectures, with permission of instructor, and listen to the recording over and over again; (3) take part in all classroom discussions; and (4) ask questions in class, after class, and in help sessions. **Visual** suggest that the student should (1) always take written notes in class and, whenever possible, ask for written instructions; (2) make his/her own drawings or diagrams when figuring out word problems; and (3) use flashcards to review all concepts, formulas, theorems, equations, and explanations. **Tactile/Kinesthetic** suggests that the student should (1) use a hands-on approach to learning; (2) make physical models of mathematical situations, whenever possible; (3) move during the learning process, such as waling while reading the math book; and (4) use the computer to learn mathematics if they are a tactile/kinesthetic learner.

At Cape Fear Community College, we attempt to **accommodate students** regardless of their learning styles, work schedule, and other personal situations. In the math area, we offer three different types of class sections, most of which have some Internet component. We have the **traditional** classroom section, a **hybrid** section, and an **internet** section. **Traditional** sections are labeled on the schedule with "D" or "N" before the section number. (D is for downtown campus; N for North campus.) Course material is presented in a lecture-discussion format. **Hybrid** sections are labeled on the schedule with "DY" or "NY" before the section number. (D is for downtown campus; N for North campus; and Y for hybrid.) Most of the course material is presented in a lecture-discussion format, but about 40% of the course work is completed online. **Internet** sections are labeled on the schedule with "I" before the section number. Course materials and assessments, such as homework and tests are presented exclusively online. Internet sections may require one or more proctored assessments.

Technology in Mathematics at CFCC

Internet-Hybrid-Traditional

Math classes at CFCC are taught using a variety of delivery methods: Internet, hybrid and traditional. Internet classes are very popular, however, not everyone is suited for these classes. To succeed in an Internet class you should have a reliable computer, be computer proficient, be a self-starter, and have the ability to learn mathematics with a minimum of instructor interaction. All college transfer and technical Internet classes require a proctored final exam. A hybrid class is a combination of the Internet and traditional delivery methods and is proving to be very popular. These classes meet 60% of the time face to face with the remaining 40% being done on the Internet. Traditional classes meet face to face for the entire semester. Although not listed as Internet or hybrid, many traditional classes require the use of various software and/or web-based assignments.

In the Classroom

It's not your same old math lecture anymore! CFCC is one of the leaders in the use of technology in the classroom. Every math classroom is equipped with a multimedia system including a digital presenter and symposium. Our instructors incorporate many different software applications to facilitate learning. These include: MyMathLab, Notebook, Derive, Maple, MS Excel, MS Excel WebAssign, & StatDisk.

The mathematics area uses SMART Notebook software, along with flat screen Symposium computers which allow instructors to post classroom notes daily. Instructors are able to use color coding to emphasize concepts as well as import pictures and definitions. Within minutes of leaving the classroom, students have access to the lesson delivered that day.

Students with learning disabilities or those who prefer to listen instead of taking notes have all the material covered that day provided as a PDF file posted to the online component of their course. Students who must be absent from class no longer have to rely on their classmate's note taking ability to obtain information they missed. These notes provide a greatly needed resource for mathematical methods and problem solving.

Mathematics on YouTube™

This year in the math area, most courses have gone hybrid. What does this mean to you? Well, the most important change is having online homework. MyMathLab is the program that most of our courses are using, and it has wonderful resources, especially the tutorial videos. I have found a great supplement for the instructional videos to be the content readily available on YouTube. That's right! YouTube is good for more than funny or gross videos: there are some excellent teaching videos as well for a wide range of subjects and topics.

Let's say you're struggling with solving a quadratic equation by completing the square (Who hasn't?). Well, all you have to do is type in the search window "completing the square" and in seconds you have 10 different lectures with examples at your finger tips. Another benefit of using YouTube for supplemental instruction is that you can find a teaching format that connects with your personal learning style. Good luck with your future math classes.

Math Lab

Cape Fear Community College's Math Lab is a walk-in tutoring service and computer lab. It's free, and available to all CFCC students. The tutors are math instructors and peer students who have taken a variety of math classes and demonstrate a thorough understanding of basic mathematics. There are 39 computers that students can use to access their online homework problems, quizzes, and tests. The Math Lab is located on the sixth floor of the "S" or McLeod Building in Room 606.

The Math Lab webpage contains much information and links to other sites. It may be accessed at <http://cfcc.edu/mathlab>.



New PE Courses

The PE area has added 7 new courses to its curriculum. These courses will be taught off campus and gives students more options and flexibility in planning their schedules. Weight Training, New Games, Indoor Cycling, and Disc Golf will be offered beginning Fall 2011 semester.

PED 117 - Weight Training I
PED 124 - Run, Swim, Cycle
PED 132 - Racquetball - Beginning
PED 154 - Swimming for Fitness
PED 211 - New Games
PED 216 - Indoor Cycling
PED 219 - Disc Golf

Fight Sleeplessness

Sleep loss can affect your metabolism and influence your hunger and weight gain. When you're over-tired, you also feel more stressed. Here are a few tips to help you get a better night's sleep.

Create a relaxing bedtime routine - listen to soothing music, read a book, or soak in a hot bath and unwind.

Make sleep a priority - set a consistent sleep and wake schedule. Go to bed at the same time each evening and wake at the same time each day - even on weekends.

Keep distractions out of the bedroom - keep work, computers, and television out of the bedroom.

Exercise regularly - moving more relieves stress and leads to more restful sleep.

Avoid caffeine, alcohol, and nicotine - all can lead to poor sleep.



CFCC students enjoy an overnight trip to the mountains as part of their Backpacking course.



Student Math League

Founded in 1970 by Nassau Community College in New York, the Student Mathematics League is an international mathematics competition among two-year community college students. Terry Shell of Santa Rosa Junior College served as the Student Mathematics League's first director after the American Mathematical Association of Two-Year Colleges assumed sponsorship in 1981. The competition consists of two rounds of individual multiple-choice tests, given in October and February of each academic year. Student Math League tests are generally at the precalculus level with questions including (but not limited to) geometry, algebra, trigonometry, statistics, and probability. Two points are awarded for a correct response, zero points if a question is left blank, and -1/2 point for an incorrect response. The five highest scores on each round constitute a school's team score. The League has grown to include more than 165 colleges representing over 35 states, as well as Bermuda, involving more than 8,000 community college students.

CFCC students who have not earned a post-secondary degree are eligible to participate. Awards are given for top scores at the national, state, and local levels. Nationally, the student with the top score on both parts receives a \$3000 scholarship to continue his/her studies at a four-year institution. The North Carolina Mathematics Association of Two-Year Colleges recognizes the top region in the state with plaques. Locally, the CFCC Foundation provided awards of \$100 for 1st place, \$50 for 2nd place and \$25 for 3rd place (ties split the awards) for both the October and February tests.

If you are interested in more information about the Student Math League, contact Valerie Melvin at 910-362-7139 or vmelvin@cfcc.edu.

CFCC Math Club

The Cape Fear Community College Math Club was started in the fall semester of 2010. The club was originally intended to be an outlet for students to prepare for the AMATYC student math league completion. However, the students involved in the club decided it had the potential to be so much more. We have had several members working as volunteer tutors with the AVID program in New Hanover County. AVID is a program that academically supports students at risk of not attending college. Our members have been tutoring students from 1st-12th grade. The tutors have also had faculty support with instructors available for questions anytime during the school day. The club has also donated over \$300 worth of non-perishable food to a local shelter and sponsored a mother with two children this Christmas season. The students in the Math Club range from MAT 080 to Calculus II which allows for peer mentoring and an eclectic group. Some of the other activities of the club include movie night, pizza and problems, and a wonderful Thanksgiving potluck. Overall, the club has harnessed the enthusiasm that the students of CFCC have for math and will continue to positively affect our community.

Student Workshop Series (SWS)

This fall continues the implementation of our SWS designed to help math students succeed at all levels. The first week all workshops will cover how to use MyMathLab. Thereafter, each course level will review materials that were covered in class the previous week. The workshops are designed to enhance the classroom experience, not to replace it. Workshops begin the second week of class and are open to all students currently enrolled in a CFCC math class. All workshops will be led by full-time faculty.



Get
R.O.P.E.D.
into Success
in Math

To achieve success in math, you should (1) **Register** for the proper course, (2) **Obtain** the proper course materials, (3) **Prepare** before class, (4) **Engage** in class participation, and (5) **Do** necessary work after class. You should prepare for and complete the placement testing before choosing a math course.

You should register for the appropriate math course based on your placement test results and your program requirements at CFCC and at your four-year institution. Testing information is available [here](#).* You may obtain information about course requirements from [testing services](#)* or by visiting [Student Support Services](#)** or the department with your program of choice. You should visit the website and/or campus of the four-year institution(s) that you plan to attend.

You should obtain proper course materials such as textbook, calculator, and computer software access. Some math courses may require a paper copy of the textbook; others may require only an electronic copy. Most math courses will require a graphing calculator and access to computer software.

You should prepare before each class meeting by reading the material that is to be discussed, studying the examples, learning the terminology, and practicing with the technology that will be presented in class.

You should engage in all class, lab, and online meetings and ask questions and give assistance as appropriate.

You should do necessary work after class. While studying, you should **compile** a list of the important points from the lesson, **combine** this list with other information available online and from other sources, and **complete** all class assignments before the due dates. Links of benefit to students are available on the [mathlab](#)[#] page. *The Math Lab (S606) is available for use by CFCC Students who are studying math.* You may access Study Skills link on that page or go directly to [Study Skills page](#).

Addresses for above links: * <http://cfcc.edu/cts/cts2.htm>;

** <http://cfcc.edu/studentsupport.html>; # <http://cfcc.edu/mathlab>; & http://cfcc.edu/mathlab/Study_Skills_Information.html