FUNDAMENTALS OF MATHEMATICS II  Common Course Number: MATH 1351

PREREQUISITE:  MATH 1350, MATH 1314 or MATH 1414 or the equivalent.


REQUIRED MATERIALS:  Student access code.
Scantron #882-ES for final exam.

OPTIONAL MATERIALS:  Scientific calculator.

COURSE DESCRIPTION:
Concepts of geometry, probability, and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. This course is designed specifically for students who seek elementary and/or middle grade teacher certification. (3 Lec.)

LEARNING OUTCOMES
1. Identify and construct the most appropriate graph from a given data.
2. Identify the best measure of central tendency for describing a given set of data.
3. Calculate the probability of an event with a sample space of equally likely outcomes
4. Determine the number of lines of symmetry and the number of rotation symmetries for a given figure.

COURSE CURRICULUM:

Chapter 7:  Uncertainty: Data and Chance
Chapter 8:  Geometry as Shape
Chapter 9:  Geometry as Transforming Shapes
Chapter 10: Geometry as Measurement

*SEMESTER DATES:
SUMMER I 2017  6/05/17 – 7/07/17  SUMMER II 2017  7/11/17 – 8/10/17
COURSE OBJECTIVES:
The following objectives will be evaluated through problem solving and/or objective tests.
1. Understand the foundations for learning mathematics and its relationship to the NCTM Standards.
2. Understand the fundamental relationship between mathematics and problem solving.
3. Teach descriptive statistics using a variety of methods.
4. Understand the concept of inferential statistics.
5. Use single stage and multi-stage probabilities to solve problems.
6. Teach basic concepts of plane geometry.
7. Understand the concepts of solid geometry.
8. Measure and convert measurements of length, area, volume, and surface area.
9. Recognize symmetries, congruence, and similarities in figures.
10. Use a variety of manipulatives and other strategies to teach mathematical concepts in grades 4-8.

INSTITUTIONAL POLICIES (listed alphabetically)

ACADEMIC ETHICS STATEMENT: “Any violations of the Student Code of Conduct (as printed in the El Centro College Catalog and available at http://www.elcentrocollege.edu/college-policies-procedures) will be penalized accordingly. All matters of academic dishonesty (plagiarism, collusion, fabrication, cheating, etc.) will result in a failing grade for the assignment in question. All violations will be forwarded to the proper college authorities for review. The college may, at its discretion, impose additional penalties on the student including academic probation, suspension, or expulsion. ANY form of disruptive behavior will not be tolerated.”

ACCESSING ECAMPUS: HOW DO I LOGIN TO ECAMPUS?
e-Campus is the web interface used to access Internet-based distance education courses. Some traditional on-campus classes will have supplemental information posted on e-Campus. The instructor will inform you if an e-Campus site exists for your course. For information go to http://www.elcentrocollege.edu/ecampus or http://ecampus.dcccd.edu

ACCESSING ECONNECT: e-Connect is the web interface that provides online student services which allow students to search, register, and pay for credit classes, view final grades and financial aid status. Go to this address: https://econnect.dcccd.edu/econnect/index.html You MUST have an e-mail address on file with the College to access e-Connect. You may use a DCCCD. If you have a question, contact eConnect@dcccd.edu

ASSESSMENT CENTER PROCEDURES

- See hours posted on first floor
- You must show a picture ID before receiving an exam.
- The Assessment Center is not responsible for giving you the right test. It is your responsibility to check the test before entering the testing area. Memorize your section number, your instructor’s name and know the name of the unit of material you are testing over. The testing center will supply scratch paper.
- Write your name, class and section number on each page of your test and scratch paper.

ATTENDANCE POLICY: Check your instructor’s syllabus for additional attendance requirements.
**CELL PHONE/PAGERS:** In order not to interrupt the class session, students are asked to turn off all cell phones and pagers prior to the beginning of class. Students not conforming to this policy will be asked to leave class.

**CHILDREN ON CAMPUS:** El Centro College strives to protect an environment most conducive to teaching and learning for all enrolled students. Minor children may not be brought to classrooms, labs, testing areas or study areas of the college. This practice is disruptive to the learning process. Children who are taking part in organized scheduled activities, or who are enrolled in specific classes, are welcomed. For reasons of security and child welfare, the college will not permit unattended children to be left anywhere on the premises. Students/Parents who have problems with childcare should visit the advisement/counseling center or the Adult Resource Center to receive referrals to childcare services in the area.

**CLASSROOM RULES AND EXPECTATIONS:** All students are required to practice courteous, respectful cooperative behavior at all times, as this would be the norm in any higher education or work environment. To avoid distractions in the classroom, students will:

- Arrive on time and stay until the class is dismissed;
- Be prepared and stay on task;
- Leave all food, drinks, candy and gum outside the classroom;
- Listen courteously to one speaker at a time, with no interruptions and no side conversations;
- Generally behave as mature adults would in the work place.

In order not to interrupt the class session, students are asked to turn off all cell phones and pagers prior to the beginning of class. Students not conforming to this policy will be asked to leave the class.

**COMPUTER USE POLICY:** This class will require you to utilize campus computers. Please see the computer use policy for the district at [https://www1.dcccd.edu/catalog/ss/computer.cfm?loc=econ](https://www1.dcccd.edu/catalog/ss/computer.cfm?loc=econ).

**COUNSELING SERVICES:** Counseling for personal, academic or career issues is provided to all students currently enrolled at El Centro College in the STEM Division. These services are provided by a licensed professional counselor who is bound by confidentiality. With the assistance of a counselor, students are able to identify, understand, resolve issues and develop appropriate skills. To make an appointment call Valerie Crow McDowell, M.S., LPC vcrow@dcccd.edu 214-860-2692.

**DROP PROCEDURE:** If you withdraw from this class, the withdrawal will be subject to El Centro’s published refund policies, and you are solely responsible for any Financial Aid obligations you may have incurred. If you are unable to complete the course, you must withdraw from it by the college’s stated drop date. *See appropriate date below.* Withdrawal from a course is a formal procedure that you must initiate. I cannot do it for you. You need to speak with me and obtain my signature to drop the course. If I am not available, a counselor, advisor, or dean may sign the drop form. If you stop attending class and do not withdraw, you will receive a performance grade, usually an “F”.

**DROP DATES:**
- Fall 2016 Thursday, November 17, 2016  
- Spring 2017 Wednesday, April 12, 2017  
- Sum I 2017 Thursday, June 29, 2017  
- Sum II 2017 Thursday, August 3, 2017
BEFORE YOU DROP
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. **You may drop no more than 6 courses during your entire undergraduate career** unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: [https://www1.dcccd.edu/coursedrops](https://www1.dcccd.edu/coursedrops)

THIRD ATTEMPT TO ENROLL IN A COURSE: [http://www.dcccd.edu/thirdcourseattempt/](http://www.dcccd.edu/thirdcourseattempt/)

The act of dropping one or more classes for a given semester, while remaining in others within the Dallas County Community College district. The act of officially dropping all courses for a given semester within the Dallas County Community College district.

FINANCIAL AID STATEMENT: Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. **Students who fail to attend or participate after the drop date are also subject to this policy.**

GRADE REPORTS: Grade reports are no longer mailed. You can log into eConnect ([http://econnect.dcccd.edu](http://econnect.dcccd.edu)) or call DCCCD Touch Tone Services at (972) 613-1818 to find out your final letter grade.

GRIEVANCE PROCEDURES: Students are expected to follow established procedures of the appropriate division in handling academic issues, such as grade appeals. El Centro College requires that other complaints and disputes (that cannot be resolved by the persons directly involved) be referred initially to the Ombudsman Office for informal, confidential resolution. Additional grievance procedures and Student Code of Conduct are outlined in El Centro College Catalog, available in hard copy in advisement or on the web at [www.elcentrocollege.edu](http://www.elcentrocollege.edu).

INCLEMENT WEATHER:
In case of inclement weather, listen to area radio and TV stations for announcements. You may also call the El Centro Inclement Weather Hotline: **(214) 860-2701**

NOTIFICATION OF ABSENCE DUE TO RELIGIOUS HOLY DAY(S): A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if, not later that the fifteenth day after the first day of the semester, the student notified the instructor of each class scheduled of the date that the student would be absent for a religious holy day. A “religious holy day” means a holy day observed by a religion whose places of worship are exempt for property taxation under Section 11.20, Tax Code. The notification shall be in writing and shall be delivered by the student personally to the instructor, with receipt acknowledged and dated by the instructor or by certified mail, return receipt requested, addressed to the instructor. **A student who is excused under**
this section may not be penalized for the absence but the instructor may appropriately respond if the student fails to satisfactorily complete the assignment.

**SPECIAL NEEDS:** Students who feel that they may need assistance or accommodations due to a disability should contact the El Centro Disability Services Office in Room A095, phone (214) 860-2411, or go to the DSO webpage at: [http://www.elcentrocollege.edu/students/disability-services](http://www.elcentrocollege.edu/students/disability-services)

**STUDENT HANDBOOK:** The student handbook with additional information for students is available at [http://www.elcentrocollege.edu/students/student-handbook](http://www.elcentrocollege.edu/students/student-handbook)

**STUDENT ID's:** Students are required to wear their student ID at all times. ID's should be visible.

**STUDY ASSISTANCE:** El Centro Learning Center (room A350) provides free group and individual tutoring. Also available are tutorial, drill & practice software, video and audio tapes, and student solutions manuals. Also, the Math Lab (room A830) provides a quiet study environment with computer access and lab assistance.

=========================================== DISCLAIMER STATEMENT===========================================
The instructor reserves the right to modify his/her attendance policy, due dates of class presentations, tests, or assignments, and his/her grading policy.