Southeastern Louisiana University
Dual Enrollment Program--Mathematics

The Southeastern Dual Enrollment Mathematics courses provide high school students the opportunity to take college mathematics courses at their high schools, and to simultaneously receive credit on their high school and Southeastern transcripts. The courses are taught with Pearson Publishing’s MathXL software, and the credit is transferable to any institution that accepts mathematics credit from Louisiana universities. There are four courses available through Southeastern’s program. All four of the courses can be taught in a year-long format or in a semester-long format. The four courses are:

**MATH 161** – College Algebra. Credit: 3 hours. A study of families of functions and their graphs. Topics include linear, polynomial, rational, exponential and logarithmic functions.

**MATH 162** – Plane Trigonometry. Credit: 3 hours. Prerequisite: Math 161. The study of trigonometric functions. Topics include the trigonometric functions and their graphs, inverse trigonometric functions, trigonometric identities and trigonometric equations. Trigonometry and trigonometric functions will be used to model and solve real world applications.

**MATH 163** – Applied Calculus. Credit: 3 hours. Prerequisite: Math 161. An introduction to differential and integral calculus designed for non-STEM majors. Topics include limits, the derivative, applications of the derivative, antiderivatives and the definite integral. Polynomial, rational, radical, exponential and logarithmic functions will be studied.

**MATH 241** – Elementary Statistics. Credit: 3 hours. Prerequisite: Math 161. An introduction to statistical reasoning. Topics include graphical display of data, measures of central tendency and variability, sampling theory, the normal curve, standard scores, Student’s T and correlation techniques.

Any school participating in Southeastern’s Mathematics Dual Enrollment Program must offer College Algebra, as it is the prerequisite to all three of the other courses. The school may then choose to offer any combination of, or all of, the other three courses. Note that the new state high school course codes correspond directly to different combinations of these dual enrollment mathematics courses. Also note that Math 163 is a non-trig based calculus course, and as such, would not satisfy college degree requirements for students who major in engineering, mathematics, physics, chemistry, or computer science fields.

**Program Requirements**

**From the High School:**
- A computer lab must be available to all Dual Enrollment Mathematics classes a minimum of three times per week. This can be a hard-wired classroom, a wireless cart, or a classroom set of iPads.

**From the Facilitator:**
- Any high school teacher who wishes to become a new Math DE facilitator must complete the New Facilitator/161 Workshop during the summer at Southeastern’s main campus in Hammond, regardless of previous experience with other universities.
- Any facilitator new to the program must complete the corresponding workshop during the summer at Southeastern’s main campus in Hammond.
- Any facilitator already in our program who would like to participate in a new class must complete the workshop for that new class during the summer at Southeastern’s main campus.
- Facilitators must attend the entire course-specific workshop to be considered eligible to facilitate that course. Missing a portion or portions of any required workshop will result in the facilitator being ineligible to facilitate that course.
- All facilitators (new and returning) must attend the DE Math Workshop at the end of the summer to copy all online course materials into MathXL (LMS system) and receive the current Program Guidelines.
- The facilitator(s) must ensure that their students meet the program requirements as outlined in the Dual Enrollment Student Eligibility Guidelines (website) and follow the guidelines of the program laid out in the Memorandum of Understanding (copy given to the principal).
- The facilitator must be certified in the discipline of the course they wish to facilitate.
From the Students:
- Students must be in the 11th or 12th grade.
- Students must be on track to complete the Core 4 curriculum with no developmental coursework required.
- Students must have an ACT, PLAN or Pre-ACT Composite score of 18 or greater (ASPIRE ≥ 430).
- Students must have an ACT, PLAN or Pre-ACT mathematics sub-score of 19 or greater (ASPIRE ≥ 431) to enroll in a Mathematics course.
- To enroll in Math 162, 163 or 241, a student must also have successfully completed Math 161.

2017 Summer Workshops

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Dates</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Facilitator / College Algebra (161)</td>
<td>June 13 – 15 9AM-3PM</td>
<td>Mandatory for all new Dual Enrollment Math facilitators.</td>
</tr>
<tr>
<td>Elementary Statistics (241)</td>
<td>June 20 – 22 9AM-3PM</td>
<td>Mandatory for any facilitator wishing to offer 241 for the first time in the upcoming school year.</td>
</tr>
<tr>
<td>Applied Calculus (163)</td>
<td>June 27 – 29 9AM-3PM</td>
<td>Mandatory for any facilitator wishing to offer 163 for the first time in the upcoming school year.</td>
</tr>
<tr>
<td>Trigonometry (162)</td>
<td>August 1 – 2 9AM-3PM</td>
<td>Mandatory for any facilitator wishing to offer 162 for the first time in the upcoming school year.</td>
</tr>
<tr>
<td>DE Math Workshop</td>
<td>July 31</td>
<td>Mandatory for all Dual Enrollment Math facilitators.</td>
</tr>
<tr>
<td></td>
<td>All Facilitators 9AM-12PM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lunch (All Facilitators) 12-1PM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New Facilitators 1-2:30PM</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- All Dual Enrollment math facilitators must complete or have completed the New Facilitator/161 workshop before they may attend another workshop or facilitate another Dual Enrollment math course.
- All facilitators new to our program must attend the New Facilitator/161 Workshop, regardless of previous experience with other universities.
- Any facilitator new to our program must facilitate Math 161 at his/her high school at least once before he/she will be allowed to facilitate any of our other courses.
- Once a facilitator has completed the workshop for a particular course, he or she is not required to repeat that workshop in subsequent summers. However, if a facilitator goes three or more school years without facilitating a particular course, then that facilitator will be required to attend the corresponding training again before being allowed to facilitate that course again.
- The only mandatory workshop for returning facilitators who do not wish to facilitate any new courses is the DE Math Workshop at the end of the summer.
- The DE Math Workshop must be repeated every summer.
- If a facilitator has never facilitated one of our DE courses, regardless of when the course-specific training was completed, then that facilitator is still considered “new” and must attend the afternoon session of the DE Math Workshop as well as the morning session.
- A facilitator is not considered eligible to facilitate a course unless he/she has attended the corresponding workshop in its entirety and the DE Math Workshop.
COURSE TITLE: Elementary Statistics  
CREDIT: 3 semester hours

accessed through the MathXL website

PUBLISHER: Pearson Education

SOUTHEASTERN CONTACT PERSON / INSTRUCTOR OF RECORD: Ronni Settoon; ronni.settoon@selu.edu  
(985)549-5892

MATH 241 is a hybrid course with all content delivered online through MathXL OR face-to-face by Southeastern faculty. The Southeastern instructor of record will develop course content and provide powerpoint notes, ungraded instructional assignments, ungraded quizzes that are similar to exams, and exam study guides to help prepare students to complete the graded assignments and the exams which are also provided by the Southeastern instructor of record. The high school teachers will act as a facilitator and assist with student registration and enrollment, proctor exams as necessary, and through supplemental instruction, serve as a daily learning resource for students as they assimilate course content. The students’ final course grades are assigned by the instructor of record.

PREREQUISITE: Successful completion of MATH161, and a composite score of 18 or above with a Mathematics score of 19 or above on the ACT, PreACT or PLAN.

COURSE DESCRIPTION: Mathematics 241 is an introduction to statistical reasoning. Topics include graphical display of data, measures of central tendency and variability, sampling theory, the normal curve, standard scores, Student’s T, Chi Square, and correlation techniques. The typical weekly structure of the course includes in-class instruction, computer laboratory work, and out-of-class assignments. Computer and internet access are necessary for completion of all assignments, both in and out of class. Evaluations will be based on homework, quizzes, tests, a final exam, and classroom participation.

<table>
<thead>
<tr>
<th>BREAKDOWN OF MATERIAL COVERED</th>
<th>Textbook Sections Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Test  Test 1</td>
<td>1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3</td>
</tr>
<tr>
<td>Test 2</td>
<td>3.4, 3.5, 4.1, 4.2, 4.3, 5.1</td>
</tr>
<tr>
<td>Test 3</td>
<td>6.1, 6.2, 7.1, 7.2, 7.3, 8.1, 8.2</td>
</tr>
<tr>
<td>Test 4</td>
<td>9.1, 9.2, 9.3, 10.1, 10.2, 10.3, 10.4, 11.1, 11.2, 11.3, 11.4</td>
</tr>
<tr>
<td>Final Exam</td>
<td>All Sections</td>
</tr>
</tbody>
</table>

CALCULATORS: Any ACT-approved calculator and the MathXL StatCrunch utility are allowed.

DISABILITY ACCESS STATEMENT: If you are a qualified student with a disability seeking accommodations under the Americans with Disabilities Act, you are required to self-identify with your facilitator and/or the appropriate office at your school. That office or your facilitator will be required to forward all relevant information and paperwork to Southeastern Louisiana University. No accommodations will be granted without documentation from your school.

TESTING:

All testing will be done in class, under strict supervision, following guidelines set forth by the Southeastern Louisiana University Mathematics Department.

Students are expected to maintain the highest standards of academic integrity. Behavior that violates these standards is not acceptable. Actions that violate our standards of academic integrity include, but are not limited to, the following: use of unauthorized material, use of any website other than MathXL, use of an unauthorized calculator, communication with fellow students and/or other individuals during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination or other class work. Cheating on examinations and plagiarism are considered very serious offenses and shall be grounds for disciplinary action as outlined in Southeastern Louisiana University’s current General Catalogue.

http://www.southeastern.edu/resources/policies/policy_detail/acad_integrity.html
HOMEWORK: Homework will be assigned for each section of material covered. Homework need not be completed in one sitting, but it must be completed before the due date and time. You must click the “Submit Homework” button in order for it to count. At the end of the semester, the two lowest homework scores will be dropped.

QUIZZES: There will be a quiz given approximately once per week, usually on material covered in two homework sets. You will be able to submit quizzes up to 10 times (with the best score counted). These must also be completed before the due date and time. You must click the “Submit” button in order for it to count. At the end of the semester, the two lowest quiz scores will be dropped.

MAKE-UP POLICY:
- No makeup work on homework or quizzes will be allowed after the corresponding unit test has been taken.
- All make-up work, including tests, must be completed within two weeks of the original due date for the assignment in question. Exceptions will be possible only in the event of a valid, documented excuse, and will be considered on a case-by-case basis. Any request for consideration of special circumstances must be submitted by your facilitator to the Southeastern Louisiana University Mathematics Department within two weeks of the original due date for the assignment in question.

WORKING FROM HOME: The online material for this course can be accessed from any computer with an internet connection. Internet access and the appropriate plug-ins are required in order to use the website where the notes, homework, and exercises are found. The website for this course is www.mathxl.com. Once you have registered for your class site in MathXL, you will be able to login to the site from home with your login and password. Click into your course and run the Browser Check found on the main page of your course to ensure the correct setup on your own computer. NOTE: Ensure that all homework and quizzes submitted from home are properly saved on the site. You should check your scores online to ensure that credit has been assigned upon submission of each and every assignment. If homework and quiz grades are not successfully sent from home and the deadline passes, the student may not be able to make up the work.

PARTICIPATION POLICIES:
- Class Meetings: Every student is expected to attend and actively participate in class.
- Computer Work: Every student is required to work on assignments for this course both in and out of class every week.
- Your participation score will be assigned and posted by your facilitator.
- If you wish to withdraw from this course, it is your responsibility to complete all procedures for withdrawing from a course.

TESTING RULES:
Southeastern Louisiana University Mathematics testing guidelines include, but are not limited to, the following:
1. Arrive on time for your test. Each and every test is only available for a certain pre-determined amount of time.
2. Your facilitator will provide you with scratch paper. No other paper is allowed.
3. ALL belongings, including cell phones and review materials, must be put away during testing, and should not be near your personal testing area.
4. Absolutely no cell phones are allowed during testing. All cell phones must be turned OFF and put away out of sight. If a cell phone is taken out and/or used during a test, it will result in a charge of academic misconduct and a score of ZERO on the test.
5. No IPODS or other music devices may be used during tests. Use of any such device during a test will result in a charge of academic misconduct and a score of ZERO on the test.
6. Any ACT-approved calculator and the MathXL StatCrunch utility are allowed to use during testing.
7. No website other than MathXL and no other area of MathXL may be accessed during tests. Accessing any such website during a test will result in a charge of academic misconduct and a score of ZERO on the test.
8. You may not write down any information pertaining to test questions to take with you when you leave the classroom after an exam. All scratch paper will be collected before you are allowed to leave. You may not share any test information with anyone who hasn’t taken the test.

APPEAL AND CHANGE OF GRADE: After a final course grade is recorded in the Records and Registration Office, a change of grade must be approved in sequence by the instructor (Dr. LeBlanc), the instructor’s department head, and the academic dean of the
College of Arts, Humanities, and Social Sciences. In the event of a contested final course grade, a student’s written appeal of the grade must be submitted to the instructor within thirty (30) calendar days of final grades for the term being due. The grade appeal should also be submitted to Dr. Jeffrey Temple, Assistant Vice President for Academic Programs. For more information about grade appeals, see http://www.southeastern.edu/resources/policies/policy_detail/instruction_practices.html
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1</td>
<td>Inference about Two Population Proportions</td>
<td>Distinguish between independent and dependent sampling; Test hypotheses regarding two proportions from independent samples; Construct and interpret confidence intervals for the difference between two population proportions; Test hypotheses regarding two proportions from dependent samples; Determine the sample size necessary for estimating the difference between 2 population proportions.</td>
</tr>
<tr>
<td>11.2</td>
<td>Inference about Two Means: Dependent Samples</td>
<td>Test hypotheses regarding matched-pairs data; Construct and interpret confidence intervals about the population mean difference of matched-pairs data.</td>
</tr>
<tr>
<td>11.3</td>
<td>Inference about Two Means: Independent Samples</td>
<td>Test hypotheses regarding the difference of two independent means; Construct and interpret confidence intervals regarding the difference of two independent means.</td>
</tr>
<tr>
<td>11.4</td>
<td>Putting It Together: Which Method Do I Use?</td>
<td>Determine the appropriate hypothesis test to perform.</td>
</tr>
</tbody>
</table>