



Your University of Choice

## COURSE SYLLABUS

Term: Spring 2016

### **MATH 104X**

#### **Instructor Information:**

<b>Instructor Name</b>	<b>Dr. Jim Sullivan</b>
<b>Office Number:</b>	<b>Room 531</b>
<b>Phone Number:</b>	<b>219.616.1976</b>
<b>Email:</b>	<b>Jsullivan1@ccsj.edu</b>
<b>Other Contact :</b>	<b>Papasully@aol.com</b>
<b>Hours Available:</b>	<b>6pm-10pm except Mon &amp; Tues</b>
<b>Instructor Background: BS Engineering, West Point; MA Business, Webster University; Ed.D., Organizational Leadership, Argosy University. Licensed Professional Engineer, Former Army Officer, Captain Infantry, Airborne, Ranger, Army Aviator (Helicopter Pilot). Own Sullivan Technology, Engineering, Consulting and Training Firm. Married, 7 children, 8 grandchildren.</b>	

#### **Course Information:**

<b>Course Time:</b>	<b>1015-1145, Monday &amp; Wednesday</b>
<b>Classroom:</b>	<b>TBA</b>
<b>Prerequisites:</b>	<b>Math 103 with a grade of "C" or better, or an equivalent Accuplacer score.</b>
<b>Textbooks:</b>	<b>Beecher, Penna, Bittinger; Algebra and Trigonometry; 4<sup>th</sup> ed, Pearson. ISBN:9780321693983</b>
<b>Learning Outcomes/ Competencies:</b> <b>Through appropriate assessments, students will demonstrate that they are able to:</b> <b>1. Remember</b> the necessary steps and procedures for manipulating, simplifying and solving; polynomial and rational functions; exponential and logarithmic functions; trigonometric functions; and the laws of sines and cosines.	

**(Learning Outcomes/ Competencies, continued)**

**2. Understand** what each procedure, manipulation, simplification, and solution means on a conceptual level.

**3. Apply** their understanding of polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, and the laws of sines and cosines to solve application problems.

**4. Analyze** problems in physics, economics, business and biology to determine appropriate methods for solving them using algebra skills and concepts.

**5. Evaluate** proposed solutions with respect to commonly accepted practices used in physics, economics, business and biology.

**Course Description:**

This course is designed to prepare students for the standard calculus sequence. Topics include polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, and the laws of sines and cosines.

**Learning Strategies:**

Blackboard, Technology, Group Discussions, Team Projects, Lecture.

**Experiential Learning Opportunities:** Applications of the course objectives.

<b>Assessments:</b>		
<b>Formative Assessments:</b>	2 quizzes (15% each)	30% of grade
<b>Summative Assessments:</b>	Midterm & Final exam(20% each)	40% of grade
<b>IXL Homework:</b>	Schedule	15% of grade
<b>Text Homework:</b>	Schedule	15% of grade

## Grading Scale:

Grade	Points
A	90-100
B	80-90(-)
C	70-80(-)
D	60-70(-)
F	Below 60

Class Participation	Tests and Quizzes:
	<ul style="list-style-type: none"><li>• Two quizzes and one midterm exam will be given during the term and <u>one comprehensive final exam</u> during exam week.</li><li>• You will be allowed to use one piece of paper (8 ½ x 11), one side only, of notes on your chapter tests.</li><li>• You will be allowed to use one piece of paper (8 ½ x 11), both sides, of notes on your final exam.</li><li>• You will be allowed to use a calculator on all exams.</li><li>• You will NOT be allowed to use any electronic devices on any exam (i.e. phone, tablet, etc.).</li><li>• <b>Please note that you MUST pass your exams to pass this course.</b></li><li>• Thoughtful completion of your homework should be done to practice and prepare for your exams.</li></ul>
	<p><b>Written homework assignments and IXL homework assignments:</b></p> <ul style="list-style-type: none"><li>• Homework is critical to your success in this course. The written homework and IXL homework are meant to serve as practice for the exams.</li><li>• Your written homework should be neat and organized. Problems should be copied from the book and all necessary work should be shown. <b>Answers without work will not be given credit.</b> All written homework from the textbook will be due when you take your exams.</li><li>• IXL homework will be due each week (see calendar for due dates). You <b>MUST</b> do at least 12 problems in each assignment, but can do more (before the due date) to raise your IXL homework score.</li><li>• It is expected that you will spend 3 – 5 hours outside of class each week practicing math. You must practice to succeed.</li></ul>

	<ul style="list-style-type: none"> <li>• <b>NO LATE HOMEWORK</b> will be accepted, for any reason, period. You are welcome to turn it in early, but never late.</li> </ul>
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<b>Policies and Procedures</b>	
<b>Class Policy on Attendance:</b>	Intellectual growth and success in college is reinforced through interaction in the classroom. Students reach personal goals and course outcomes through regular and prompt attendance. <b>Therefore, if a student is absent “three (3) times” the student will be subjected to a grade of F or FW per policy stated under the Withdrawal from Classes section on this syllabus. Unexplained absences must be explained within 24 hours by phone or email, or grades will be lowered.</b>
<b>Class Policy on Electronic Devices</b>	Electronic devices are out of place in this classroom. Please keep them silent and put away during class. Additionally, <b>NO ELECTRONIC DEVICES OF ANY KIND ARE TO BE USED ON QUIZZES OR EXAMS.</b>
<b>Class Participation:</b>	<b>No discourtesy, disruption or inappropriate behavior will be tolerated.</b>
<b>Statement of Plagiarism:</b>	<p>If an instructor or other Calumet College of St. Joseph personnel find that a student has plagiarized or been involved in another form of academic dishonesty, the instructor or other personnel may elect to bring the matter up for judicial review. The maximum penalty for any form of academic dishonesty is dismissal from the College. The procedures for judicial review are listed under the section of CCSJ handbook that addresses student grievances.</p> <p>PLEASE NOTE: All papers can and may be submitted for checks on plagiarism from the Internet/Electronic sources/Databases.</p>
<b>Citation Guidelines:</b>	Calumet College of St. Joseph uses citation guidelines, generally MLA or APA format, to document sources quoted or paraphrased in student papers. Check the syllabus for <u>each</u> course to see what <u>each</u> instructor requires. The Library has reference copies of each manual; the Follett has copies for sale when required by the instructor. In addition, there are brief MLA and APA checklists in your spiral “Student Handbook and Planner” and on the Library website and literature rack. These texts show how to cite references from many sources, including electronic media, as well as how to space and indent the “Works Cited” and “References” pages respectively. EBSCO and ProQuest articles provide both formats for you to copy and paste. Proper documentation avoids plagiarism.
<b>Withdrawal from Classes Policy:</b>	After the last day established for class changes has passed (see College calendar), students may withdraw from a course in which they are registered and wish to discontinue. A written request detailing the reason(s) for the withdrawal must be completed with the Office of Academic Advising and filed with the Registrar. The Office of Academic Advising must receive written request for withdrawal by the last day of classes prior to the final examination dates specified in the catalogue. Written

	<p>requests should be submitted in person or, when an in-person visit is not possible, may be mailed to the Office of Academic Advising, emailed, or faxed to 219-473-4336. Students are to make note of the refund schedule when withdrawing from courses. If the request requires instructor approval per the College calendar, it must be forwarded to the faculty member, who makes the final determination to accept or deny the request.</p> <p>If the request is honored by the faculty member, the student will receive notification of official withdrawal from the Registrar after meeting or speaking with a member from Academic Advising, Financial Aid and Athletics (if applicable). These departments will notify the student of academic, financial, and athletic eligibility effects of a possible withdrawal.</p> <p>If the request is denied by the faculty member, the notification will indicate why the withdrawal is disallowed. Please note that if the request does not require instructor approval, the student must still meet or speak with a member from Academic Advising, Financial Aid and Athletics (if applicable) before the withdrawal will be processed.</p> <p>An official withdrawal is recorded as a "W" grade on the student's transcript. Discontinuing a course without a written request for withdrawal automatically incurs an "FW" grade for the course (see Refund Schedule). Failure to Withdraw (FW) is indicated when the student does not complete withdrawal paperwork with the Office of Academic Advising nor does the student notify the instructor of their intent to withdraw due to an illness, accident, grievous personal loss, or other circumstances beyond the student's control. <u>This grade is submitted by the instructor at the end of term.</u></p>
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<b>Resources</b>	
<b>Student Success Center:</b>	<p>The Student Success Center supports Calumet College of St. Joseph students through an interactive learning experience. Students work with faculty tutors to develop course competencies and study skills such as time management, test preparation, and note taking. In addition, students are provided with tutoring support to help pass courses, to improve grade point average, and to promote continuing education and career advancement. Tutors have a specific charge: to help students learn how to master specific subject matter and to develop effective learning skills. The Student Success Center is open to all students at Calumet College of St. Joseph at no charge and is available to support academic courses at the introductory and advanced levels. For assistance, please contact the Student Success Center at 219 473-4287 or stop by the Library.</p>
<b>Disability Services:</b>	<p>Disability Services strives to meet the needs of all students by providing academic services in accordance with Americans Disability Act (ADA) guidelines. Students must meet with the Coordinator of Disability Services to complete an intake form in order to request an accommodation and/or an auxiliary aid (e.g., <i>additional time for tests, note taking assistance, special testing arrangements, etc.</i>). It is the student's responsibility to contact the Academic Support Programs Office to request an accommodation at least <u>one month prior to enrollment</u> for each academic term. Students who are requesting an accommodation and/or an auxiliary aid must submit documentation from a professional health care provider to verify eligibility under Section 504 of the</p>

	<p>Rehabilitation Act of 1973 and/or the Americans with Disabilities Act of 1990. The cost of obtaining the professional verification is the responsibility of the student.</p> <p>If a student believes that he or she needs a “reasonable accommodation” of some kind because of a physical, psychological, or mental condition, he or she should contact Disabilities Services. The Coordinator will secure documentation pertinent to the disability and work with faculty and staff, if necessary, to address the matter. All questions and inquiries pertaining to disability services should be directed to the Disability Services Coordinator at 219-473-4349.</p>
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<p><b>CCSJ Alert:</b></p>	<p>Calumet College of St. Joseph utilizes an emergency communications system that transmits messages via text, email, and voice platforms. In the event of an emergency, of weather related closings, or of other incidents, those students who are registered for the system shall receive incident specific message(s) notifying them of the situation. Please sign-up for this important service at any time on the College’s website. Alternatively, you can register at the time you register for classes. This service requires each user to register once per academic year. Therefore, at the beginning of each academic year, please remember to re-register for the system. This can be done at: <a href="http://www.ccsj.edu/alerts/index.html">http://www.ccsj.edu/alerts/index.html</a>.</p> <p style="text-align: center;"><b><u>School Closing Information:</u></b></p> <p><b><u>Internet:</u></b> <a href="http://www.ccsj.edu">http://www.ccsj.edu</a></p> <p style="text-align: center;"> <a href="http://www.EmergencyClosings.com">http://www.EmergencyClosings.com</a>          Facility: Calumet College of St. Joseph          Phone: 219.473.4770       </p> <p><b><u>Radio:</u></b></p> <p style="text-align: center;">         WAKE – 1500 AM          WGN - 720 AM          WIJE – 105.5 FM          WLS – 890 AM          WZVN – 107.1 FM          WBBM NEWS RADIO 78       </p> <p><b><u>TV Channels:</u></b></p> <p style="text-align: center;">2, 5, 7, 9, 32</p>
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**Class Schedule (See Text & IXL Homework Schedule below)**

11 Jan 2016	Introduction, Syllabus, Ground rules, Ch R
13 Jan	Ch R & 1
20 Jan	Ch 1
25 Jan	Ch 1
27 Jan	Ch 2
1 Feb	Ch 2
3 Feb	Quiz (R-2)
8 Feb	Ch 3
10 Feb	Ch 3
15 Feb	Ch 4
17 Feb	Ch 4
22 Feb	Ch 4
24 Feb	Ch 4
7 Mar	Review for Midterm
9 Mar	Midterm (R-4)
14 Mar	Ch 5
16 Mar	Ch 5
21 Mar	Ch 6
23 Mar	Ch 6
28 Mar	Ch 6
30 Mar	Quiz (5-6)
4 Apr	Ch 7
6 Apr	Ch 7
11 Apr	Ch 7
13 Apr	Ch 8
18 Apr	Ch 8
20 Apr	Review for Final
27 Apr	Final (5-8)

**Text Homework Schedule (All homework due next class period).**

11 Jan	p.54: 15, 18, 23, 27, 41, 50, 57, 62
13 Jan	56: 7, 10, 15, 21, 29, 34, 36
20 Jan	150: 8,13, 19, 24, 30, 33, 36, 41, 51, 59, 64, 73, 88
25 Jan	154: 2, 8, 12, 17, 25, 30, 35, 40
27 Jan	227: 2, 10, 13, 36, 50, 52, 57, 70
1 Feb	231: 5, 13, 21, 29, 34, 38

8 Feb	290: 8, 16, 23, 30, 34, 39, 43, 54, 56
10 Feb	293: 4,15,19,20,23,28,31
15 Feb	382: 9, 12, 18, 22, 23, 26, 28, 32
17 Feb	382-3: 35, 39, 44, 50, 54, 58, 63
22 Feb	383-4: 66, 71, 73, 79, 80, 81
24 Feb	385-6: 3, 5, 11, 17, 23, 30
14 Mar	471: 9, 11, 13, 24, 30, 37, 50, 58, 78, 90, 93
16 Mar	475: 1, 5, 6, 8, 11, 15, 18, 26, 29, 30, 33
21 Mar	578: 8, 12, 15, 18, 23, 27, 32, 41, 46
23 Mar	579: 49, 54, 56, 60, 74, 80, 83, 88
28 Mar	581: 1, 3, 11, 15, 18, 23, 26, 28
4 Apr	645: 9, 11, 18, 21, 25, 31, 35, 40
6 Apr	646: 43, 49, 56, 58, 63, 70, 71
11 Apr	648: 2, 3, 9, 12, 16, 18, 22, 26, 28
13 Apr	731: 1, 2, 4, 6, 7, 9, 11
18 Apr	731: 12, 13, 14, 15, 16

**All IXL HOMEWORK IS DUE BY MIDNIGHT ON FRIDAY OF THE WEEK ASSIGNED.**  
**Schedule may be changed to comply with needs and pace of the class.**

11 Jan 2016	Introduction, Syllabus, Ground rules, Ch R
13 Jan	B1-5; C1-11
20 Jan	D1-7; E1-7
25 Jan	I1-7
27 Jan	P1-6
1 Feb	Q1-7
3 Feb	Quiz (R-2)
8 Feb	J1-12; L1-13
10 Feb	M1-6; T1-9
15 Feb	K1-19
17 Feb	K1-19
22 Feb	N1-7
24 Feb	N1-7
7 Mar	Review for Midterm
9 Mar	Midterm (R-4)
14 Mar	R1-12
16 Mar	S1-14
21 Mar	U1-7
23 Mar	X1-6

<b>28 Mar</b>	<b>Z1-9</b>
<b>30 Mar</b>	<b>Quiz (5-6)</b>
<b>4 Apr</b>	<b>Y1-16</b>
<b>6 Apr</b>	<b>Y1-16</b>
<b>11 Apr</b>	<b>AA1-4</b>
<b>13 Apr</b>	<b>Y17-21</b>
<b>18 Apr</b>	<b>Y17-21</b>
<b>20 Apr</b>	<b>Review for Final</b>
<b>27 Apr</b>	<b>Final (5-8)</b>