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Calumet College

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of Saint Joseph

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*Calumet College of St. Joseph is a Catholic institution of higher learning dedicated to the academic, spiritual and ethical development of undergraduate and graduate students. Informed by the values of its founding religious community, the Missionaries of the Precious Blood (C.P.P.S.), the College promotes the inherent dignity of all people, social justice, an ethic of service, student empowerment, opportunity, and lifelong learning.*

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## COURSE SYLLABUS, Fall, 2017

### Math 104A - Algebra & Trigonometry

#### Instructor Information:

<b>Instructor Name</b>	Br. Benjamin Basile, C.P.P.S.
<b>Office Number:</b>	303
<b>Phone Number:</b>	(219) 473-4280
<b>Email:</b>	bbasile@ccsj.edu
<b>Office Hours:</b>	M: 1:15-1:45 pm; 3:15-4:00 pm; Tu/Th: 8:30-11:45 am, 3:15-4:00 pm; W: 12:00-1:00 pm Other times by appointment. Please call or email. Please note that committee meetings, etc. may make it impossible to always be available at the above times.
<b>Instructor Background: Member of the Precious Blood Missionaries, the religious order which founded and sponsors CCSJ; M.S. in Mathematics from the University of Notre Dame; 30 graduate hours in Education from the University of Akron; graduate study in computer science at DePaul Univ.; 11 years as a high school math instructor (3 as a Principal); 36 years at CCSJ in computer, as Registrar, and in math (12 years as head of math).</b>	

#### Course Information:

<b>Course Time:</b>	Monday and Wednesday, 8:30-10:00 am
<b>Classroom:</b>	(to be announced)
<b>Prerequisites:</b>	MATH 103 with a grade of 'C' or better, or an equivalent Accuplacer© score.
<b>Required Books and Materials:</b>	1) Textbook: Beecher, Penna, Bittinger; <u>Algebra and Trigonometry</u> ; 4 <sup>th</sup> ed, Pearson ISBN: 9780321693983 2) Scientific Calculator
<b>Course Description:</b> 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 Outcomes/ Competencies:**

Through appropriate assessments students will demonstrate that they are able to:

1. **Remember** the necessary steps and procedures for manipulating, simplifying, and solving: polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, and the laws of sine's and cosines.
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 sine's 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.

This course meets the following General Education objectives:

Students can represent, apply, analyze, and evaluate relevant qualitative and quantitative mathematical and scientific evidence to support or refute an argument (e.g., using equations, graphs, diagrams, tables, words).

**Learning Strategies:**

Group discussions, lecture, lots of practice via written and on-line assignments. Active participation in class and utilization of **resources such as Blackboard** and the **CCSJ Student Success Center** will help ensure your success

**Experiential Learning Opportunities:**

Application problems will be used in each chapter of the course.

**Assessments:****Assignments and tests:**

**Mathematics is a participation sport!** Thus, written and on-line assignments are an integral part of the learning process. Working problems is crucial to your success. Collecting assignments and giving points for them are meant to serve as an incentive. On written assignments, problems should be numbered and adequate work shown for each, with answers clearly marked. Correct answers without accompanying work, where appropriate, will not be given credit. To receive full credit, work should be neat, organized and complete, and should include the student's name, date and class on each page. **DO NOT SKIP ANY PROBLEMS.** Be sure to **give yourself enough time to complete the written and on-line assignments** and to get help if needed. **LATE ASSIGNMENTS WILL NOT BE ACCEPTED.**

**ASSIGNMENTS AND CLASS SCHEDULE ARE SUBJECT TO CHANGE AND WILL ALWAYS BE ANNOUNCED IN CLASS AND POSTED ON BLACKBOARD.**

On-line (IXL) assignments will be due with each test (see posted dates on Blackboard) You **MUST** do at least 12 problems in each section of the assignments, but can **AND SHOULD** do more (before the due date and time) to raise your on-line (IXL) assignment score. **Go for 100's on all IXL sections!**

	<p><b><u>It is expected that you will spend 3-5 hours outside of class each week practicing math, as you MUST practice to succeed.</u></b></p> <p><b><u>NO LATE HOMEWORK (WRITTEN OR ON-LINE) WILL BE ACCEPTED, SO PLAN ACCORDINGLY. IF YOU MUST BE ABSENT ON THE DAY A HOMEWORK ASSIGNMENT IS DUE, YOU MAY TURN IT IN EARLY.</u></b></p>
	<p>Several <u>chapter tests</u> will be given during the term and <u>one comprehensive final exam</u> during exam week. Written and on-line (IXL) assignments will also constitute part of the final grade.</p> <p>Chapter tests                      60% of grade  Comprehensive final exam    20% of grade  Written assignments            10% of grade  On-line (IXL) assignments    10% of grade</p> <p>Grading Scale: (given as a percent of total possible points)</p> <p>A: 93-100    A-: 90-92    B+: 87-89    B: 83-86    B-: 80-82    C+: 77-79  C: 73-76    C-: 70-72    D+: 67-69    D: 63-66    D-: 60-62    F: below 60</p>
<b>Course schedule:</b>	<p>Please see attached pages for the tentative Class Schedule and beginning assignments. <b>ASSIGNMENTS AND CLASS SCHEDULE ARE SUBJECT TO CHANGE AND WILL ALWAYS BE ANNOUNCED IN CLASS AND POSTED ON BLACKBOARD.</b></p>

<b>Responsibilities</b>	
<b>Attending Class</b>	<p>You cannot succeed in this class if you do not attend. We believe that intellectual growth and success in higher education occur through interaction in the classroom and laboratories. However, we do not want to penalize students for participating in college-sponsored events. When you miss class because of a college event, you must give notice of your absence in advance, and you are responsible for all missed work. Being absent doesn't excuse you from doing class work; you have <b>more</b> responsibilities to keep up and meet the objectives of this course.</p> <p style="text-align: center;"><b><i>Eighty percent of success is showing up.</i></b> -Woody Allen</p> <p>Attendance is important and is expected (see "participation sport" message under Assignments, above). You are responsible for all material covered in class, including announcements of assignments and quizzes. <b><u>IF YOU MISS CLASS, YOU MUST CONTACT THE INSTRUCTOR BY E-MAIL (bbasile@ccsj.edu) OR PHONE WITHIN 24 HOURS, TO AVOID THE ASSESSMENT OF A FIVE (5)</u></b></p>

	<p><b>POINT PENALTY FOR EACH MISSED CLASS.</b> The instructor is more than willing to meet you halfway on this, but remember that there are TWO halves.</p> <p>Your lowest CHAPTER EXAM score (<b>NOT final exam score</b>) will be dropped. If you are absent on the day of an exam, that will be your dropped exam score. There are <b>ABSOLUTELY NO make-up exams for any reason</b>. That is why your lowest chapter exam score is dropped. If you have an athletic competition or other important appointment, send me an electronic notice at least 48 hours in advance and you can take the exam BEFORE your absence.</p>
<b>Turning In Your Work</b>	You cannot succeed in this class if you do not turn in all your work by the day it is due. <b><u>LATE ASSIGNMENTS WILL NOT BE ACCEPTED.</u></b>
<b>CCSJ Student Honor Code</b>	<p>This course asks students to reaffirm the CCSJ Student Honor Code:</p> <p>I, as a student member of the Calumet College academic community, in accordance with the college's mission and in a spirit of mutual respect, pledge to:</p> <ul style="list-style-type: none"> <li>• Continuously embrace <b>honesty and curiosity</b> in the pursuit of my educational goals;</li> <li>• Avoid all behaviors that could impede or distract from the academic progress of myself or other members of my <b>community</b>;</li> <li>• Do my own work with <b>integrity</b> at all times, in accordance with syllabi, and without giving or receiving inappropriate aid;</li> </ul> <p>Do my utmost to act with commitment, inside and outside of class, to the goals and <b>mission</b> of Calumet College of St. Joseph.</p>
<b>Using Electronic Devices</b>	As a matter of courtesy, electronic communication devices should be switched off; <b><u>texting is out of place.</u></b> In the event of necessity for answering a cell phone during class, please inform the instructor ahead of time and set the device to "vibrate", if possible, and answer it in the hallway. Use of laptops and tablets must be for class purposes only. NO ELECTRONIC DEVICES OTHER THAN CALCULATORS (BUT <b>NOT</b> THOSE ON PHONES) ARE ALLOWED DURING TESTS.
<b>Participating in Class</b>	Be on time and use the time for active participation with the material, asking questions and working problems.
<b>Doing Your Own Work</b>	If you turn in work that is not your own, you are subject to judicial review, and these procedures can be found in the College Catalog and the Student Planner. The maximum penalty for any form of academic dishonesty is dismissal from the College.
<b>Tracking Your Progress</b>	The Gradebook section on Blackboard provides up-to-date data on your progress throughout the term, including test scores, points on written and IXL assignments and your current overall Weighted Average for the course. In addition, your midterm grade will be available on MyCCSJ between Weeks 6 and 8. Be sure to monitor your own progress and follow up with your instructor as needed.

<b>Sharing Your Class Experience</b>	At the end of the term, you will have the opportunity to evaluate your classroom experience. These confidential surveys are <i>essential</i> to our ongoing efforts to ensure that you have a great experience that leaves you well prepared for your future. Take the time to complete your course evaluations - we value your feedback!
<b>Withdrawing from Class</b>	After the last day established for class changes has passed (see the College calendar), you may withdraw from a course by following the policy outlined in the CCSJ Course Catalog.

<b>Resources</b>	
<b>Student Success Center:</b>	The Student Success Center provides faculty tutors at all levels to help you master specific subjects and develop effective learning skills. It is open to all students at no charge. You can contact the Student Success Center at 219 473-4287 or stop by the Library.
<b>Disability Services:</b>	Disability Services strives to meet the needs of all students by providing academic services in accordance with Americans with Disabilities Act (ADA) guidelines. If you believe that you need a “reasonable accommodation” because of a disability, contact the Disability Services Coordinator at 219-473-4349.
<b>Student Assistance Program</b>	This free and confidential counseling service is available on-campus to help you deal with personal issues. The counseling office is in Room 301. You can reach them at 219 473-4362 (on campus) or 219-736-4067.
<b>CCSJ Alerts:</b>	Calumet College of St. Joseph’s emergency communications system will tell you about emergencies, weather-related closings, or other incidents via text, email, or voice messages. Please sign up for this important service annually on the College’s website at: <a href="http://www.ccsj.edu/alerts/index.html">http://www.ccsj.edu/alerts/index.html</a> .

**Missionaries of the Precious Blood** (Br. Ben’s religious order)

Visit our websites: [www.cpps-preciousblood.org](http://www.cpps-preciousblood.org) and <http://cppsmissionaries.org>

Find us on Facebook at Missionaries of the Precious Blood

Follow us on Twitter: @CPPSGaspar

**MATH 104A – Tentative SCHEDULE OF CLASSES – Fall, 2017 – Br. Basile**  
**NOTE: “work in progress” - AS ANNOUNCED IN CLASS AND ON BLACKBOARD**

Mon/Sep 4	<b><u>Labor Day Holiday (US) – NO CLASS</u></b>
Wed/Sep 6	Syllabus; Ch. R; Dept. Pre-test; HW: IXL, written Ch. R
Mon/Sep 11	Questions on Ch. R; Ch1 in-class problems; HW: IXL, written Ch. 1
Wed/Sep 13	Questions on Ch. 1; begin Ch. 2; HW: finish Ch. 1 written and IXL
Mon/Sep 18	Ch. R&1 questions (test prep); continue Ch. 2; HW: Ch. 2 and test prep
Wed/Sep 20	<b><u>Test, Ch. R&amp;1; Ch. R&amp; 1 written and IXL due beginning of class</u></b>
Mon/Sep 25	<b>TO</b>
Wed/Sep 27	
Mon/Oct 2	<b>BE</b>
Wed/Oct 4	
Mon/Oct 9	<b>CONTINUED...as announced in class and on Blackboard</b>
Wed/Oct 11	
Mon/Oct 16	
Wed/Oct 18	
Mon/Oct 23	
Wed/Oct 25	
Mon/Oct 30	
Wed/Nov 1	
Mon/Nov 6	
Wed/Nov 8	
Mon/Nov 13	
Wed/Nov 15	
Mon/Nov 20	
Wed/Nov 22	
Mon/Nov 27	
Wed/Nov 29	
Mon/Dec 4	
Wed/Dec 6	
Mon/Dec 11	<b><u>FINAL EXAM (date tentative: see published schedule near end of term)</u></b>

**MATH 104A – Fall, 2017 – Br. Basile**  
**WRITTEN & ON-LINE (IXL) ASSIGNMENTS**  
**(NOTE: as of September 6 – to be continued)**

**Written Assignments Ch. R&1 [DUE beginning of class, September 20]\*\***

- (A) pp. 56-57, #1-38
- (B) pp. 154-156, #1-41

**IXL Assignments Ch. R&1 [DUE beginning of class, September 20]\*\***

**Ch. R      Algebra 2 (A2 or M) tab:**

- I.7 – Factor polynomials**
- N.6 – Add/subtract rational expressions**
- N.5 – Multiply/divide rational expressions**
- N.7 – Solve rational equations**

**Pre-calculus (PC or N) tab:**

- H.6 – Simplify radical expressions w/variables**
- H.8 – Simplify expressions with rational exponents**

**Ch. 1      Pre-calculus (PC or N) tab:**

- A.6 – Linear functions**
- A.7 – Graph a linear function**
- A.8 – Write the equation of a linear function**
- P.5 – Write equations of circles in standard form**

**Algebra 2 (A2 M) tab:**

- C.5 – Graph solutions to linear inequalities**

**A SmartScore of at least 75 should be achieved on each IXL section.**  
**But AIM FOR 100 in each section.**

**Login at [www.ixl.com](http://www.ixl.com) (username@calumetcollege)**

**Assignments are due at the BEGINNING OF CLASS ON**  
**SEPTEMBER 20**  
**NO LATE ASSIGNMENTS WILL BE ACCEPTED.**

# Emergency Procedures

## MEDICAL EMERGENCY

### EMERGENCY ACTION

1. Call 911 and report incident.
2. Do not move the patient unless safety dictates.
3. Have someone direct emergency personnel to patient.
4. If trained: Use pressure to stop bleeding.
5. Provide basic life support as needed.

## FIRE

### EMERGENCY ACTION

1. Pull alarm (located by EXIT doors).
2. Leave the building.
3. Call 911 from a safe distance, and give the following information:
  - Location of the fire within the building.
  - A description of the fire and how it started (if known)

## BUILDING EVACUATION

1. All building evacuations will occur when an alarm sounds and/or upon notification by security/safety personnel. **DO NOT ACTIVATE ALARM IN THE EVENT OF A BOMB THREAT.**
2. If necessary or if directed to do so by a designated emergency official, activate the building alarm.
3. When the building evacuation alarm is activated during an emergency, leave by the nearest marked exit and alert others to do the same.
4. Assist the disabled in exiting the building! Remember that the elevators are reserved for persons who are disabled. **DO NOT USE THE ELEVATORS IN CASE OF FIRE. DO NOT PANIC.**
5. Once outside, proceed to a clear area that is at least 500 feet away from the building. Keep streets, fire lanes, hydrant areas and walkways clear for emergency vehicles and personnel. The assembly point is the sidewalk in front of the college on New York Avenue.
6. **DO NOT RETURN** to the evacuated building unless told to do so by College official or emergency responders.

## IF YOU HAVE A DISABILITY AND ARE UNABLE TO EVACUATE:

Stay calm, and take steps to protect yourself. If there is a working telephone, call 911 and tell the emergency dispatcher where you are **or** where you will be moving. If you must move,

1. Move to an exterior enclosed stairwell.
2. Request persons exiting by way of the stairway to notify the Fire Department of your location.
3. As soon as practical, move onto the stairway and await emergency personnel.
4. Prepare for emergencies by learning the locations of exit corridors and enclosed stairwells. Inform professors, and/or classmates of best methods of assistance during an emergency.

## HAZARDOUS MATERIAL SPILL/RELEASE

### EMERGENCY ACTION

1. Call 911 and report incident.
2. Secure the area.
3. Assist the injured.
4. Evacuate if necessary.



## TORNADO

### EMERGENCY ACTION

1. Avoid automobiles and open areas.
2. Move to a basement or corridor.
3. Stay away from windows.
4. Do not call 911 unless you require emergency assistance.

## SHELTER IN PLACE

### EMERGENCY ACTION

1. Stay inside a building.
2. Seek inside shelter if outside.
3. Seal off openings to your room if possible.
4. Remain in place until you are told that it is safe to leave.

## BOMB THREATS

### EMERGENCY ACTION

1. Call 911 and report incident.
2. If a suspicious object is observed (e.g. a bag or package left unattended):
  - Don't touch it!
  - Evacuate the area.

## TERRORISM AND ACTIVE SHOOTER SITUATIONS

### EMERGENCY ACTION

1. Call 911 and report intruder.

## RUN, HIDE OR FIGHT TIPS:

1. **Prepare** – frequent training drills to prepare the most effectively.
2. **Run and take others with you** – learn to stay in groups if possible.
3. **Leave the cellphone.**
4. **Can't run? Hide** – lock the door and lock or block the door to prevent the shooter from coming inside the room.
5. **Silence your cellphone** -- use landline phone line.
6. **Why the landline?** It allows emergency responders to know your physical location.
7. **Fight** – learn to “fight for your life” by utilizing everything you can use as a weapon.
8. **Forget about getting shot – fight!** You want to buy time to distract the shooter to allow time for emergency responders to arrive.
9. **Aim high** – attack the shooter in the upper half of the body: the face, hands, shoulder, neck.
10. **Fight as a group** – the more people come together, the better the chance to take down the shooter.
11. **Whatever you do, do something** – “react immediately” is the better option to reduce traumatic incidents.