COURSE SYLLABUS

Term: Fall, 2015

Math 148A – Math for Elementary Teachers I

Instructor Information:	
Instructor Name	Br. Benjamin Basile, C.PP.S.
Office Number:	303
Phone Number:	(219) 473-4280
Email:	bbasile@ccsj,edu
Office Hours:	M/W: 9-10:15 am, 3:15-4:30 pm; Tu/Th: 9-11:30 am, 3:15-4:30 pm Other times by appointment. Please note that committee meetings, etc. may make it impossible to always be available at the above times. Please call or email.
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; 11 years as a high school math instructor (3 as a Principal); 34 years at CCSJ in computer, as Registrar and in math (12 years as head of math).	

Course Information:	
Course Time:	Monday and Wednesday, 1:45-3:15 pm
Classroom:	305
Prerequisites:	MATH 097 with a grade of 'C' or better, or an equivalent Accuplacer© score.
Required Books and Materials:	Billstein, Libeskind & Lott, A Problem Solving Approach to Mathematics for Elementary Teachers, 11th edition, Addison Wesley, 2010 (ISBN: 978-0-321-75666-4)

Learning Outcomes/ Competencies:
Upon successful completion of this course, students will have acquired the skills and knowledge base necessary to do the following:
    - organize and consolidate their mathematical thinking through communication
    - correctly use the language and symbols of mathematics in communicating mathematical ideas
    - use multiple forms of representation, including concrete models, pictures, diagrams, tables, and graphs
    - understand and appropriately apply technology as an integral part of teaching and learning mathematics	

- competently explore mathematical concepts from various points of view, recognizing that students
    present a variety of learning styles
- competently guide elementary school students in the developing the ability to apply and adapt a
    variety of appropriate strategies in problem solving
- use pattern recognition and analysis as a problem-solving tool
- apply a variety of reasoning techniques (e.g. inductive, deductive) in problem solving
- recognize and generalize arithmetic, geometric and other numerical sequences
- represent and analyze mathematical situations using algebraic symbols and techniques
- describe and appropriately apply sets and set techniques in various contexts
- apply set concepts such as union, intersection and equivalence to elementary arithmetic
    manipulations such as whole number addition and subtraction
- correctly identify and perform calculations in various numeration systems
- describe and apply various elementary algorithms, such as division
- distinguish among the various building-block sets comprising the real numbers
    (i.e., natural, whole, integer, rational, irrational)
- distinguish among and correctly describe and apply the various number properties
    (e.g. commutativity, associativity)
- describe and correctly apply divisibility rules
- describe and apply prime number concepts (e.g. prime factorization, GCF, LCM)
- describe and apply rational number concepts
- describe and apply proportional reasoning concepts
- describe and apply manipulation of decimals, percents, and scientific notation
- describe and apply real number concepts such as rational and irrational numbers and their
    decimal representations

Course Description: This is the first course in a two-semester sequence for elementary teachers covering the fundamental ideas and theories of mathematics beginning with arithmetic. Topics include problem solving, sets, whole numbers, integers, rational numbers, real numbers and algebraic expressions. Mathematical reasoning and precision of language are emphasized. Although various perspectives and approaches are taken for individual topics, this content course is not a methods course in the teaching of mathematics.

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 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 assignment and to get help if needed.	

	Several <u>chapter tests</u> will be given during the term and <u>one comprehensive final exam</u> during exam week. Up to two chapter tests may be retaken, on an individual basis, at the student's option, during the term. The higher grade from the test or re-take will be used in figuring the final grade. If a chapter test is missed due to absence from class, the makeup for that test will count as one of the three allowed re-takes. A number of <u>quizzes</u> will also be given on line through Blackboard, each announced in advance. **Missed quizzes cannot be made up.** However, the **lowest <u>quiz grade</u> will be dropped**.	
	Assessment: 　　tests　　　　　　　　　　　　1/2 of grade 　　comprehensive final exam　　1/4 of grade 　　quizzes and written assignments　1/4 of grade **Grading Scale:** (given as a percent of total possible points) 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	
Course schedule:	Please see attached pages for the tentative Class Schedule and beginning assignments. **ASSIGNMENTS AND CLASS SCHEDULE ARE SUBJECT TO CHANGE AND WILL ALWAYS BE POSTED ON BLACKBOARD.**	

Responsibilities

Attending Class	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 **more** responsibilities to keep up and meet the objectives of this course. 　　　*Eighty percent of success is showing up.* -Woody Allen 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. **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)**

	POINT PENALTY FOR EACH MISSED CLASS. The instructor is more than willing to meet you halfway on this, but remember that there are TWO halves.
Using Electronic Devices	As a matter of courtesy, electronic communication devices should be switched off; **texting is out of place**. 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 **NOT** THOSE ON PHONES) ARE ALLOWED DURING TESTS.
Participating in Class	Be on time and use the time for active participation with the material, asking questions and working problems.
Doing Your Own Work	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.
Withdrawing from Class	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.

Resources	
Student Success Center:	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.
Disability Services:	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.

CCSJ Alerts:	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: http://www.ccsj.edu/alerts/index.html.
	In addition, you can check other media for important information, such as school closings:
	Internet: http://www.ccsj.edu
	Radio: WAKE – 1500 AM, WGN – 720 AM, WIJE – 105.5 FM, WLS – 890 AM, WZVN – 107.1 FM, WBBM NEWS RADIO 78
	TV Channels: 2, 5, 7, 9, 32

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

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MATHEMATICS FOR ELEMENTARY TEACHERS I - MATH 148
Section A - Fall, 2015 - Br. Basile

WRITTEN ASSIGNMENTS
(NOTE: as of August 31, to be continued…)

Written Assignment Ch. 1
      (A) p. 15, #8,11,12; p. 16 (1-1B) #1,8,15
          I. Using each of the digits 1,2,4,5,7 only once, what two numbers form the
             largest product? The smallest product?
          II. Suppose you could spend $10 every minute, night and day. How much
             would you spend in a non-leap year?
      (B) pp. 30-31 (1-2A), #1,2,3,6,9-13,21
         p. 31 (1-2B), #1
      (C) pp. 48-49, #4-7,10,16

MATH 148A – <u>Tentative</u> SCHEDULE OF CLASSES – Fall, 2015 – Br. Basile
NOTE: "work in progress" - AS ANNOUNCED IN CLASS & posted on Blackboard

Mon/Aug 31   1.1

Wed/Sept 2   1.1, 1.2

Mon/Sept 7   **<u>Labor Day – NO CLASS</u>**

Wed/Sept 9   1.2

Mon/Sept 14   **<u>Quiz (1.1, 1.2)</u>**; 2.1

Wed/Sept 16   2.1, 2.2

Mon/Sept 21   2.2, 2.3

Wed/Sept 23   **<u>Test (1.1, 1.2, 2.1)</u>**; 2.3

Mon/Sept 28   2.3, 3.1

Wed/Sept 30   3.1, 3.2

Mon/Oct 5   **<u>Quiz (2.3, 3.1)</u>**; 3.2, 3.3, 3.4

Wed/Oct 7   3.3, 3.4

Mon/Oct 12   3.4, 4.1, 4.2

Wed/Oct 14   **<u>Test (2.2, 2.3, 3.1-3.4)</u>**; 4.3

Mon/Oct 19   4.3, 5.1

Wed/Oct 21   **<u>Quiz (4.1, 4.2)</u>**; 5.1

Mon/Oct 26   5.2, 5.3

Wed/Oct 28   5.3, 5.4

Mon/Nov 2   5.5

Wed/Nov 4   **<u>Quiz (5.1-5.4)</u>**; 5.5, 6.1, 6.2

Mon/Nov 9   6.2, 6.3

Wed/Nov 11   **<u>Test (4.1-5.5)</u>**; 6.3

Mon/Nov 16   7.1, 7.2

Wed/Nov 18   7.2

Mon/Nov 23   7.3, 7.4

Wed/Nov 25   **<u>Quiz (7.1, 7.2)</u>**; 8.1

Mon/Nov 30   8.1, 8.2

Wed/Dec 2   8.2, Review

Wed/Dec 9   **<u>FINAL EXAM (tentative date: see published schedule near end of term)</u>**