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COURSE SYLLABUS

Term: Spring, 2016

Math 149A – Math for Elementary Teachers II

Instructor Information:

Instructor Name	Br. Benjamin Basile, C.P.P.S.
Office Number:	303
Phone Number:	(219) 473-4280
Email:	bbasile@ccsj.edu
Office Hours:	M: 9-10:15 am, 3:15-4:30 pm; Tu/Th: 1:00-4:30 pm; W:(9:00-10:15 am, 1:00-1:45 pm, 3:15-4:30pm. 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:	306
Prerequisites:	MATH 148
Required Books and Materials:	Billstein, Libeskind & Lott, <u>A Problem Solving Approach to Mathematics for Elementary Teachers</u> , 11 th 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: <ul style="list-style-type: none">- 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	

<ul style="list-style-type: none"> - understand and appropriately apply technology as an integral part of teaching and learning mathematics - describe and apply concepts of elementary probability, including the use of permutations and combinations as counting techniques - describe and apply techniques of data investigation, including data gathering and description using measures of central tendency - describe and apply techniques of elementary statistics including various representations of data and drawing of appropriate conclusions - describe and apply basic concepts of plane geometry (e.g. linearity, types of angles and their measurements, polygons, congruence, constructions, similarity and proportion) - describe and apply measurement concepts (e.g. length, area, volume, mass, temperature) - describe and apply elementary concepts of the Cartesian coordinate system for lines in the plane - describe and apply elementary concepts of motion geometry and tessellations
<p>Course Description: This course is a continuation of Mathematics for Elementary Teachers I. It is the second course in a two-semester sequence for elementary teachers covering the fundamental ideas and theories of mathematics beginning with arithmetic. Topics include geometry, probability, statistics, and measurement. 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.</p>
<p>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</p>
<p>Experiential Learning Opportunities: Application problems will be used in each chapter of the course.</p>

Assessments:	
Assignments and tests:	<p>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. <u>Correct answers without accompanying work, where appropriate, will not be given credit.</u> To receive full credit, <u>work should be neat, organized and complete,</u> and should include the student's name, date and class on each page. DO NOT SKIP ANY PROBLEMS. Be sure to <u>give yourself enough time to complete the written assignment</u> and to get help if needed.</p>
	<p>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.</p>

	<p>Missed quizzes cannot be made up. However, the lowest quiz grade will be dropped.</p> <p>Assessment:</p> <table> <tr> <td>tests</td> <td>1/2 of grade</td> </tr> <tr> <td>comprehensive final exam</td> <td>1/4 of grade</td> </tr> <tr> <td>quizzes and written assignments</td> <td>1/4 of grade</td> </tr> </table> <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>	tests	1/2 of grade	comprehensive final exam	1/4 of grade	quizzes and written assignments	1/4 of grade
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comprehensive final exam	1/4 of grade						
quizzes and written assignments	1/4 of grade						
Course schedule:	Please see attached pages for the tentative Class Schedule and beginning assignments. ASSIGNMENTS AND CLASS SCHEDULE ARE SUBJECT TO CHANGE AND ARE ANNOUNCED IN CLASS AND POSTED ON BLACKBOARD.						

Responsibilities	
Attending Class	<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 more responsibilities to keep up and meet the objectives of this course.</p> <p style="text-align: center;"><i>Eighty percent of success is showing up.</i> -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. <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) POINT PENALTY FOR EACH MISSED CLASS.</u> The instructor is more than willing to meet you halfway on this, but remember that there are TWO halves.</p>
Using Electronic Devices	<p>As a matter of courtesy, electronic communication devices should be switched off; <u>texting is out of place.</u> 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</p>

	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:	<p>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.</p> <p>In addition, you can check other media for important information, such as school closings:</p> <p>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</p>

WRITTEN ASSIGNMENTS, subject to change, as announced in class and posted on Blackboard

Chapter 5

p. 238 (5-1A) #1-3,4(a,b),5(a,b),6,7,8(a),9,10,11,13,22,23
pp. 251-252 (5-2A) #1-8,13,17,25

Chapter 6

Define: Rational numbers
What is the Property of Denseness that the Rational numbers have?
Do the Integers have the Property of Denseness? Why or why not?
pp. 272-273 (6-1A), #1-9,11,12,18,22,23
pp.287-288 (6-2A), #1-3,6-8,11,13,15,22
pp. 307-308 (6-3A), #1-6,10,11,15-17,20,22
pp. 320-321 (6-4A), #1-22
pp. 327-328, #1,6,9,13,16-19,22,28,30

Chapter 7

pp. 388-389, #2,5,6,7,8,12,13,14

Chapter 8

What kinds of decimals represent Rational numbers?
What kind of decimals represent Irrational numbers?
Define: Real numbers
pp. 400-401, #2,4,11,14

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

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

Find us on Facebook at Missionaries of the Precious Blood

Follow us on Twitter: @CPPSGaspar

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.