Term: Fall 2013 (2013-1)

Course #: CHEM 430L Instrumental Analysis Lab
Instructor: Dr. Sandra Chimon Peszek (pronounced Pesh-ick)
Office Room #: 325
Phone #: (219) 473-4268
E-mail: speszek@ccsj.edu
Other Phone: (Text) (773) 719-8759 (please identify yourself first and what class you are from).
Hours (Available): TBD

Instructor Background:
B.S University of Illinois (Chemistry); Ph.D. University of Illinois (Chemistry); Post-Doctoral Fellow, University of Illinois (Bioanalytical Chemistry); Adjunct Professor: National Louis University (2008), Prairie State College (2008-2009), Elmhurst College (2008-2009), Visiting Assistant Professor: DePaul University (2009-2011) and Assistant Professor of Bioanalytical Chemistry and Director of Undergraduate Studies (2011-2013).

What does my research at Calumet College of St. Joseph entail?
• Analyze structural and neurotoxic properties of neurodegenerative-disease related proteins and peptides, which are major suspects of Alzheimer's disease and Parkinson's disease by the use of natural products such as basil, sage, melatonin, curry, melatonin, just to name a few.
• Utilize various sample preparation techniques including but not limited to biochemical assays, kinetics, neurotoxic effects involving instrumentation such as fluorescence, UV/Vis, NMR, FTIR, and electron microscopy.
• The types of sciences which are involved in my research cover a broad range of interdisciplinary aspects from analytical chemistry, physical chemistry, biophysics, nanotechnology, bioanalytical, molecular biology, biochemistry, and neuroscience.

Course Time/Classroom #: TBD

Course Description: This course is designed to give the students a broad experience in the theory of instrumentations. The labs will be investigative in nature where students are required to use the Internet and the Chemical literature to explore practical ways of using instruments for solving chemical problems qualitatively and quantitively. The students will survey the theory and application of instruments such as: visible, ultra violet, Infra red, Fluorescence, Nuclear Magnetic Resonance, Atomic absorption, Chromatography, and Mass Spectrometry.

Prerequisites: CHEM 225, MATH 220, PSY 230. Students enrolled in this course must also enroll concurrently in the laboratory course CHEM 430. Learning Outcomes/Competencies: (Students in this course will gain and acquire the following:

Science Department Mission Statement
The science department has identified excellence in student learning as a primary goal. In an effort to meet this objective, we are working diligently to incorporate the best pedagogical practices into all science courses. To this end, the science faculty strives to foster an environment that is conducive to all learners.
Professionalization goals

The science department has established the following criteria in an effort to professionalize all science majors. Science faculty will assess a student’s progress in these six key areas. The six areas are integrity and ethics; reliability and dependability; service orientation; social, interpersonal and teamwork skills; desire to learn and; resilience and adaptability.

Indiana Statewide Transfer General Education Core (ISTGEC)

4. Scientific Ways of Knowing

Upon completion of the General Education Transfer Core, students will be able to:

4.1. Explain how scientific explanations are formulated, tested, and modified or validated.

4.2 Distinguish between scientific and non-scientific evidence and explanations.

4.3 Apply foundational knowledge and discipline-specific concepts to address issues or solve problems.

4.4 Apply basic observational, quantitative, or technological methods to gather data and generate evidence-based conclusions.

4.5 Use current models and theories to describe, explain, or predict natural phenomena.

4.6 Locate reliable sources of scientific evidence to construct arguments related to real world issues.

Course Learning Outcomes:

<table>
<thead>
<tr>
<th>Course Learning Outcomes</th>
<th>(ISTGEC)</th>
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</thead>
<tbody>
<tr>
<td>1. Explore natural phenomena of the world of everyday experiences using scientific methods and use theories to interpret observations.</td>
<td>4.1 &amp; 4.2</td>
</tr>
<tr>
<td>2. Describe, differentiate and explain form, function, and variation within diverse physical and/or biological systems.</td>
<td>4.3, 4.5 &amp; 4.6</td>
</tr>
<tr>
<td>3. Analyze, determine, and evaluate the results of scientific experiments.</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Textbooks and Material:

- Laboratory manual (available online - Blackboard; select CHEM 200L)
- Goggles, Sellstrom Safety (Product # SF88210), Superior Industrial Supply Co. (available at the bookstore)
- Lab Coat
- Lab notebook (Research Notebook)

Learning Strategies:

Group discussions, collaborative learning, blackboard, facilitated learning, student centered learning.

Experiential Learning:

In this course we will be working on daily in class activities and participating throughout the lecture also on a daily basis. With this in mind, not only will the instructor reemphasis the material learned, but the student will also teach the material to their fellow classmates. We learn from teaching.

Assessment:

Your grade for this course will be based on the total number of points you accumulate during the session. Any questions regarding grading must be addressed within one week after the graded material has been returned to you.

1 Professionalization Goals and Guidelines for Science Majors at Calumet College of St. Joseph, 2011
The grade you earn in this course will be determined by the following components:

9 out of 10 labs (40 pts each) __100__% of grade

**Attendance**: Attendance is required for laboratory. There are no make-ups for missed labs. If a student arrives more than ten minutes late to lab, he/she will be considered absent and will receive a grade of zero for that laboratory experiment. Students who arrive late (within the requisite ten minutes) to the laboratory will not be given extra time to complete the lab. Laboratory instructors and TAs are not required to permit students to continue working beyond the scheduled end time of the lab.

Students with two or more unexcused absences from the laboratory will automatically fail the course. Excusable reasons may include: participation in a CCSJ varsity sporting event or a scientific conference, an illness that keeps the student from attending school, or a death in the family; student athletes must provide documentation from the Athletic Department regarding any scheduled sporting competition before the missed laboratory session takes place. For these excusable reasons only, the situation will be handled at the discretion of the laboratory instructor.

**Preparation for Lab**: A careful reading of the laboratory manual is required before performing an experiment. You should have a clear understanding of the theory behind the experiment, the reaction(s) that will be studied, and any data analysis or calculations that must be completed. In order to ensure that you are prepared for the laboratory experiment, you will be asked to both prepare your lab notebook and complete a pre-laboratory assignment.

a. **Pre-lab Questions**: In order to gain entrance to the lab, students must present a completed pre-laboratory assignment to the laboratory instructor. The pre-laboratory assignments are part of the laboratory instruction materials. If a student arrives without a completed pre-laboratory assignment, the laboratory instructor has the right to ask the student to leave the lab. In this case, the student will be considered to have an unexcused absence from the lab.

b. **Laboratory Notebook Preparation**: No laboratory instruction materials will be allowed in the laboratory unless otherwise informed by the instructor. Any specifics about the procedure must be recorded in the laboratory notebook before the laboratory period begins. If a student arrives unprepared for lab, the laboratory instructor has the right to ask the student to leave the lab. In this case, the student will be considered to have an unexcused absence from the lab.

c. **Laboratory Notebook and Related Scientific Ethics**: You must record all data in an official course laboratory notebook. This is a spiral bound notebook that may be obtained from the bookstore. Make sure that you write your name on your notebook and supply any other pertinent contact information that can be used to return the notebook to you in case it is lost.

One goal of this course is to introduce you to the proper manner of keeping a laboratory notebook. The rules of notebook keeping delineated below are all aimed at ensuring that your notebook is a faithful and complete representation of your work in the lab. Ethically, a scientist cannot remove evidence of any work they have done from the lab notebook. Incorrect work can be noted as such, but anyone looking at your notebook should be able to observe any errors you have made. Additionally, a scientist cannot prove they first discovered something if evidence of this discovery is not present in a lab notebook with the date on which the discovery was made, and the signature of a witness to the discovery. Scientists rely on the information present in laboratory notebooks to avoid repeating mistakes and make efficient progress. For all of these reasons, you will be asked to maintain a high-quality laboratory notebook.

All data recorded in the laboratory notebook must be recorded in **black or dark-blue ink only**. Notes taken in pencil, or in pencil overwritten in pen, will reduce the laboratory notebook score. You will be making a carbon copy of your data. Make sure your carbon copies are clear and legible. Press hard and use the inside flap of the notebook to protect other sheets. **NEATNESS COUNTS!** The instructor will verify your data and calculations. If the instructor cannot read your data sheets because of bad penmanship, organization, or other neatness factors, your report grade may suffer.
If you make a mistake, delete entries by crossing them out neatly with a single line. This practice ensures that anyone who sees your notebook can see any errors you have made, as well as your correct work. You cannot write your work on scrap paper; any scrap paper notes found will be confiscated and not returned. Before leaving the laboratory have the laboratory instructor sign the page(s) with your data and turn in the duplicate(s) of the page(s) you worked on. Original pages should never be torn from the notebook. The notebook should retain an intact sequence of numbered pages. Please be aware that your laboratory notebook is subject to inspection to verify and authenticate your experimental observations.

The notebook pages must contain any and all pieces of information needed to obtain the final results for the experiment. Such information includes, but is not limited to:

- The title of the experiment
- The name of your laboratory partner, if applicable
- The date of the experiment
- The procedure for the experiment (not a word-for-word copy of the lab manual contents, but your notes that will allow you to complete the experiment)
- A detailed list of procedural changes
- A detailed list of equipment and its condition
- Clearly written data with proper significant figures and units, in tabular form
- Clearly written calculations with proper significant figures and units

The burden is on you to make sure you have all of the data that is necessary to write a successful laboratory report. Performing the calculations before leaving lab will help make sure that you have all of the necessary data. Every student in the lab will have their notebook reviewed by the instructor. This is to occur after the completion of every lab meeting. You will be graded on how you prepare and maintain your laboratory notebook, the accuracy of your calculations, and the accuracy of your results.

**Laboratory Rules:** If you fail to adhere to the safety rules delineated below you will not be allowed to remain in lab. Behavior that is deemed by the instructor to be unsafe to yourself or to others will result in your dismissal from that week’s experiment. You will not be allowed to finish the lab at a later time.

- The use of cell phones in the laboratory is strictly forbidden. Your cell phone must be turned off for the duration of the laboratory period.
- If you are pregnant, you must obtain a letter from your obstetrician that states that it is safe for you to conduct experiments during the quarter and you must submit this letter to your lab instructor.
- Safety glasses/goggles must be worn at all times in the lab. Contact lenses are not recommended; wear prescription glasses instead.
- Open-toes shoes, shorts, skirts, short-sleeved shirts, tank-tops, and excessively loose or flowing clothes are forbidden in the lab. You must adhere to the lab attire rules or you will be asked to leave the lab.
- Smoking, eating, drinking, gum chewing, and applying cosmetics in the lab are prohibited.
- Long hair must be tied back.
- Gloves must be worn when handling chemicals. You must remove your gloves before exiting the laboratory. Always wash your hands after each lab.
- Never use your mouth to pipette a liquid; use a pipette bulb.
- Never leave experiments unattended.
- Never return excess chemicals to the stock bottle.
- Dispose of waste in the appropriately-labeled containers ONLY.
- Always return equipment in its original condition and to its original location.
- Clean up after yourself. Clean your part of the laboratory bench at the end of your stay in the lab. Points will be taken off the lab report grade if the balance room or the laboratory is left untidy.
**General Laboratory Guidelines:**

- Know the locations of the safety shower, eye wash stations, and first aid kit in the lab.
- Report all personal injuries to the instructor who will assess the wound and summon professional help if necessary.
- Assume the chemicals are dangerous unless you are told otherwise.
- Work only with clean equipment and glassware (dry) on a clean bench top.
- Carefully handle and measure appropriate quantities of the reagents needed in the experiment.
- Use the right chemicals – pay attention to the names of the chemicals you plan to use. You could cause a serious accident if you mix the wrong chemicals.
- Save all solutions and solids until you have successfully completed the experiment.
- Manage your time wisely so that you do not rush or take short cuts.
- Record all data in ink in your laboratory notebook while you work! Do not write data, even temporarily, on scraps or other pieces of paper. Make sure your data is complete. Make sure to record the date or the unknown number, if any.
- If you do not know or are unsure about any aspect of your experiment, ask the instructor.

Your preparedness and behavior in lab will be evaluated as part of your lab report grade. If you follow the rules and guidelines stated above, earning these points should be straightforward.

**Laboratory Reports/Worksheets:** Laboratory reports or worksheets are typically due one week after the completion of an experiment. No late work will be accepted. Students should use the posted rubric as a guide when preparing the laboratory report or worksheet. The rubric must be printed and attached as a cover sheet for the reports or worksheets, which must be submitted to the laboratory instructor upon entry to the laboratory session unless otherwise indicated.

a. Only hardcopies of reports or worksheets will be graded. In addition, electronic copies of the laboratory reports must be submitted to the corresponding experiment’s dropbox on Blackboard (Bb). Hand-written calculations do not need to be submitted electronically. **Failure to upload your lab report to the appropriate digital dropbox on time will automatically result in a 5-point deduction in your lab report grade (12.5% of your grade).** Please note that all laboratory reports submitted electronically will be examined using Turn-It-In technology in order to ensure that the work is your own creation.

b. In instances of excusable absences from lab, the student must make every effort to deliver the previous week’s report or worksheet on time. If it is impossible to deliver a hard copy of the report or worksheet on time, an electronic version should be submitted to Bb before the start of the lab. A hard copy must then be delivered as soon as possible to the laboratory instructor (or placed in the instructor’s mailbox in the chemistry department office). The hard copy of the report must be received before the start of the next laboratory period. Any substantive differences between the electronically submitted and hard copies of the laboratory report will not be graded.

**Laboratory Resources:** The lab instructor has office hours during which they can answer questions regarding pre-lab assignments, calculations from a lab, the writing of lab reports, etc. If you have questions regarding the formatting, organization, etc. of your lab report, you should refer first to the rubric for the lab and the lab report writing guidelines; both of these are available on Bb. If you still have questions, you should contact the lab instructor. With enough notice, they may be able to look over a rough draft of your report. In addition, the Center for Writing has tutors familiar with writing lab reports that can help you revise a rough draft. In all cases, it is important to schedule an appointment several days before your report is due.
Grading: Each experiment is worth 40 points that are distributed across a pre-laboratory assignment, a written report or worksheet, and a laboratory category (e.g. preparedness, goggle use, etc.). Each week a specific grading rubric for that week’s laboratory will be posted online. The instructor will use the scheme on the rubric to grade the report.

Any student concerns about grading on laboratory reports or other evaluated work must be addressed within one week after receipt of the graded material. The lowest laboratory score will be dropped and the grade computed out of the remaining scores. The percentage score will be determined, and the following scale applied.

Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-92</td>
</tr>
<tr>
<td>A-</td>
<td>91-90</td>
</tr>
<tr>
<td>B+</td>
<td>89-88</td>
</tr>
<tr>
<td>B</td>
<td>87-82</td>
</tr>
<tr>
<td>B-</td>
<td>81-80</td>
</tr>
<tr>
<td>C+</td>
<td>79-78</td>
</tr>
<tr>
<td>C</td>
<td>77-72</td>
</tr>
<tr>
<td>C-</td>
<td>71-70</td>
</tr>
<tr>
<td>D+</td>
<td>69-68</td>
</tr>
<tr>
<td>D</td>
<td>67-62</td>
</tr>
<tr>
<td>D-</td>
<td>61-60</td>
</tr>
<tr>
<td>F</td>
<td>59 and below</td>
</tr>
</tbody>
</table>

Note: Concerns about assignment or exam grading must be brought to my attention, in person, immediately after obtaining a copy of your exam from my office. You will have an additional 2 days after the lab has been returned and has been graded. Furthermore, concerns about your overall performance in the course must be brought to my attention before the final grade submission. Do not contact me after the final grade submission requesting extra credit or points to receive a grade you want (but did not earn).

Attempts to discuss grades or grading issues over email will not be honored. You must speak with me about such matters during office hours or arrange a time for a separate appointment (contacting me about scheduling such an appointment over email is allowable).

In cases beyond simple arithmetic on the score sheet, the instructor reserves the right to re-grade the whole exam/report. Any issue not explicitly discussed here will be handled at the discretion of the instructor.

Theoretically, everyone in this class could get an A. This fact means that you are never in competition with your classmates. I have this policy to encourage you to study in groups for the exams to help each other out. I encourage you to follow your performance using the grades that will be posted on Blackboard.

General Outline of the Course:

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab Number</th>
<th>Lecture Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 9/04/13</td>
<td></td>
<td>NO LAB</td>
</tr>
<tr>
<td>W 9/11/13</td>
<td></td>
<td>Safety - Introduction</td>
</tr>
<tr>
<td>W 9/18/13</td>
<td>1</td>
<td>Proper Techniques to a good lab notebook</td>
</tr>
<tr>
<td>W 9/25/13</td>
<td>2</td>
<td>UV/Vis</td>
</tr>
<tr>
<td>W 10/2/13</td>
<td>3</td>
<td>IR and FTIR</td>
</tr>
<tr>
<td>W 10/9/13</td>
<td>4</td>
<td>ATR-FTIR</td>
</tr>
<tr>
<td>W 10/16/13</td>
<td>5</td>
<td>Fluorescence/CD</td>
</tr>
<tr>
<td>W 10/23/13</td>
<td>6</td>
<td>1D 1H NMR</td>
</tr>
<tr>
<td>W 10/30/13</td>
<td>7</td>
<td>1D 13C NMR</td>
</tr>
<tr>
<td>W 11/6/13</td>
<td>8</td>
<td>2D NMR - COSEY, NOESY, TOCSY, ROSEY</td>
</tr>
<tr>
<td>W 11/13/13</td>
<td>9</td>
<td>Various 2D NMR</td>
</tr>
<tr>
<td>W 11/20/13</td>
<td>10</td>
<td>HPLC/CE</td>
</tr>
<tr>
<td>W 11/27/13</td>
<td></td>
<td>THANKSGIVING - NO CLASSES</td>
</tr>
<tr>
<td>W 12/4/13</td>
<td></td>
<td>Finals Week FINAL EXAM</td>
</tr>
</tbody>
</table>

I reserve the right to make changes to this schedule, as necessary.

HAVE A GREAT SEMESTER!

Have a great semester!
Student Success Center:
The Student Success Center supports Calumet College of St. Joseph students through an interactive learning experience. Students work with 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 room 413.

The Supplemental Instruction (SI) Program is an academic support program designed to increase student performance and retention. The SI Program provides peer-assisted study sessions to aid students in academic courses that often prove challenging. Weekly study sessions are led by a supplemental instructor, a “peer facilitator” who helps students master course content and practice effective study skills. In SI sessions, students are provided with an opportunity to review lecture notes, clarify difficult concepts, discuss ideas, and study for tests in group settings. SI sessions are for students who need or want supplemental instruction in courses in which SI support is provided. Students may attend as many sessions as they deem helpful. For more information regarding the SI Program, contact the Academic Support Programs Office at 219 473-4352.

Statement of Plagiarism:
It will be assumed at all times that work handed in is one’s own and one’s own alone, unless specific credit is given to the contributions of others. The giving or receiving of assistance during examinations is dishonest. Any violations of the academic integrity (i.e., copying assignments, plagiarism, cheating on exams, etc...) will be treated with the utmost seriousness.

Cheating on Exams
Cheating on exams comes in two forms: (1) Communicating with others in any form, either verbally or nonverbally, as a way of sharing information during an exam; (2) Bringing in some sort of aid, such as notes, to assist you during the taking of an exam. To help facilitate honest test taking, I will require that all cell phones be shut off and put away, all tables cleared, and all hats removed, during all exams.

Plagiarism
Plagiarism is the presentation of the ideas, opinions, or the writings of others as though it were your own. Plagiarism is stealing. It is dishonest, unethical, and illegal. It is also not a very smart approach to school, because it defeats the point of your being here, namely, to improve your own powers of thought and expression.

Consequences of Academic Dishonesty
I have zero tolerance for cheating or plagiarism in my classroom. If you are caught cheating on an exam, or if you are caught plagiarizing on a written assignment, you will receive a zero on that exam or written assignment without impunity. You will not be given the opportunity to retake an exam, or to drop or rewrite the assignment. I will also turn the matter over to the proper channels for further possible action. I will have no reservations reporting this activity.

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.
PLEASE NOTE: All papers can and may be submitted for checks on plagiarism from the Internet/Electronic sources/Databases.

Citation Guidelines:
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 each course to see what each instructor requires. The Library has reference copies of each manual; the Bookstore 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.

Withdrawal from Classes Policy:
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 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.

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.

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.

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. This grade is submitted by the instructor at the end of term.

Disability Services:
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., additional time for tests, note taking assistance, special testing arrangements, etc.). It is the student's responsibility to contact the Academic Support Programs Office to request an accommodation at least one month prior to enrollment 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 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.

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.

**CCSJ Alert:**
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: http://www.ccsj.edu/alerts/index.html.

**School Closing Information:**

**CCSJ Alerts:**
An emergency communications system that transmits messages via text, email, and voice platforms. Please sign-up for this important service at any time on the College’s website. This can be done at: http://www.ccsj.edu/alerts/index.html.

**Internet:**
http://www.ccsj.edu
http://www.EmergencyClosings.com
Facility: Calumet College of St. Joseph
Phone: 219.473.4770

**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