

Name JACOB GLENN FLORA JANSALIN

Student No. 80-47122 Sex Male

Date & Place of Birth Dec. 8, 1957 / Larena, Negros

Father's Name Jacobo Jansalin Oriental

Mother's Name Rizalina Flora

Degree/Title/Course MASTER OF SCIENCE

Major \_\_\_\_\_ Chemistry

Date graduated April 14, 1985

### Grades

VIRCA  
FILE

9/12/8

Remarks.

122702

credits: One university unit of credit is one hour lecture or recitation each week for the period of a complete semester of 16 to 17 weeks. In all courses, two and a half to three hours of laboratory work, and, in technical courses, three hours of drafting or shop work, are regarded as the equivalent of one hour of recitation or lecture.

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Typed by: Louise Plumb Date: 8-13-81



Name JACOB GLENN F. JANSALIN

Degree B.S. Chem.   
 our 12400

Date Awarded March 12, 1978

Date of Birth December 8, 1957

Title X-X-X

Date Granted X-X-X

Home Address 406 Caring Reyes, Iarom

Major X-X-X

Minor X-X-X

Other Records of Graduation:

Primary (not indicated in Form 137-A)

Intermediate Tapon Elementary School - 1970

High School Negros Oriental High School - 1974

Parent or Guardian Jacobo Jansalin

| Course No.      | Title                    | Grade | Credits | Group | Course & No. | Title                      | Grade      | Credits | Group |
|-----------------|--------------------------|-------|---------|-------|--------------|----------------------------|------------|---------|-------|
| 1st Sem 1974-75 |                          |       |         |       |              |                            |            |         |       |
| 11              | Basic Comm I             | B-    | 3       |       | Math 41      | Integral Calc              | B-         | 3       |       |
| 11              | Basic Comm I             | A-    | 1       |       | Phys 30      | Geology                    | A-         | 3       |       |
| 11              | Gen Chemistry            | A-    | 4       |       | Math 30      | App Gen Stat w/Demography  | A-         | 3       |       |
| 45              | Gen Physics I            | B     | 4       |       | PE 22        | Basic Phys Ed              | A          | 1       |       |
| 11              | Coll Algebra             | A-    | 3       |       |              | ROTC                       | A          | 1       |       |
| 11              | Intro to Socio           | B     | 3       |       |              |                            |            |         |       |
| 11              | Basic Phys Educ          | A-    | 1       |       |              |                            |            |         |       |
|                 | ROTC                     | A     | 1       |       |              |                            |            |         |       |
| 2nd Sem 1974-75 |                          |       |         |       |              |                            |            |         |       |
| 12              | Basic Com II             | A-    | 3       |       |              |                            |            |         |       |
| 12              | Basic Com II             | A-    | 1       |       | YCAP         | Youth Civic Action Program | Completion |         |       |
| 12              | Gen Chemistry            | A     | 4       |       |              |                            | Certified  |         |       |
| 46              | Gen Physics II           | B     | 4       |       |              |                            |            |         |       |
| 12              | Plane Trigo              | A-    | 3       |       |              |                            |            |         |       |
| 11              | Mien & Message of Jesus  | B     | 3       |       | Span 11      | Elem Span                  | B-         | 3       |       |
| 12              | Basic Phys Educ          | A-    | 1       |       | Bio 23       | Gen Bio                    | B-         | 5       |       |
|                 | ROTC                     | A     | 1       |       | Chem 62      | Mineralogy                 | B-         | 3       |       |
| 1st Sem 1975-76 |                          |       |         |       |              |                            |            |         |       |
| 25              | Adv Comp & the Res Paper | C     | 3       |       | Chem 71      | Physical Chem              | B-         | 4       |       |
| 41              | Inorg Chem & Qual Anal   | A     | 5       |       | Chem 75      | Technical Analysis         | B-         | 3       |       |
| 47              | General Physics III      | B     | 3       |       | Math 43      | Diff Equations             | B-         | 3       |       |
| 47              | Organic Chem             | A-    | 5       |       |              |                            |            |         |       |
| 21              | Basic Phys Educ          | A-    | 1       |       | Soc 46       | Fam & Com Educ w/Fam Plan  | B-         | 3       |       |
|                 | ROTC                     | A-    | 1       |       | Hist 41      | Rizal's Life & Works       | A          | 3       |       |
| 29              | Anal Diff-Calc Combined  | A-    | 3       |       | Eco 20       | Prins of Eco w/T & LR      | B          | 3       |       |
| 2nd Sem 1975-76 |                          |       |         |       |              |                            |            |         |       |
| 44              | Analytical Chem          | B     | 5       |       | Span 12      | Intern Span                | A-         | 3       |       |
| 48              | Organic Chem             | A-    | 5       |       | Bio 66       | Gen Microbio               | A-         | 3       |       |
|                 |                          |       |         |       | Chem 88      | Biochem                    | A-         | 3       |       |
|                 |                          |       |         |       | Chem 72      | Phys. Chem                 | A-         | 4       |       |
|                 |                          |       |         |       | Chem 58      | Chem Lit                   | A-         | 1       |       |

Class signed by the Registrar and  
 dated this record is only a statement  
 of the student's progress to date and  
 is an official transcript.

R. R. DATO  
 Registrar

APR 26 1979  
 Date

| School Year          | 1974-75 |      |     | 1975-76 |      |     | 1976-77 |      |      | 1977-78 |      |     |     |     |     |
|----------------------|---------|------|-----|---------|------|-----|---------|------|------|---------|------|-----|-----|-----|-----|
| Term                 | 1st     | 2nd  | Sum | 1st     | 2nd  | Sum | 1st     | 2nd  | Sum  | 1st     | 2nd  | Sum | 1st | 2nd | Sum |
| Unit Load            | 20      | 20   | -   | 21      | 21   | -   | 21      | 23   | 9    | 20      | 16   | -   |     |     |     |
| Term QPA             | 3.20    | 3.45 | -   | 3.33    | 3.28 | -   | 2.71    | 3.23 | 3.50 | 3.58    | 3.68 | -   |     |     |     |
| Cumulative Unit Load | -       | 40   | -   | 61      | 82   | -   | 103     | 126  | 135  | 155     | 171  | -   |     |     |     |
| Cumulative QPA       | -       | 3.32 | -   | 3.52    | 3.31 | -   | 3.19    | 3.20 | 3.22 | 3.26    | 3.30 | -   |     |     |     |

Student is in GOOD STANDING (granted transfer credential) unless otherwise indicated on the transcript.

MARKS: Continued on Page 2.

EMETERIA P. LEE  
 University Registrar  
 University of the Philippines

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JANSALIN, JACOB GLENN F.



EDMAN, ... \* Page 2 \* OFFICIAL TRANSCRIPT OF RECORD  
JACOB GLENN E. JANSALIN Page 3  
Degree X-X-X Date Awarded X-X-X 56  
Date of Birth X-X-X Title X-X-X Date Granted X-X-X  
Home Address X-X-X Major X-X-X Minor X-X-X  
Other Records of Graduation: X-X-X  
Primary X-X-X  
Intermediate X-X-X  
High School X-X-X  
Parent or Guardian X-X-X

| Course No                                                                                                                                             | Title                                           | Grade | Credits | Group | Course & No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Title | Grade | Credits | Group |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------|---------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|---------|-------|--|
| Summer 1977                                                                                                                                           |                                                 |       |         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 21                                                                                                                                                    | Adv Spanish                                     | A     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |       |       |         |       |  |
| 20                                                                                                                                                    | Mean & Message of Jesus                         | A     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 1 51                                                                                                                                                  | Phil Nat'l Gov & New Const                      | B     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 1st Sem 1977-78                                                                                                                                       |                                                 |       |         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 41                                                                                                                                                    | Survey of Phil Lit                              | B     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 69                                                                                                                                                    | Colloid Chem                                    | A     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 89                                                                                                                                                    | Theory                                          | A     | 2       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 91                                                                                                                                                    | Indust Inorg Chem                               | A     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 97                                                                                                                                                    | Undergrad Thesis                                | B     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 23                                                                                                                                                    | Found of Civiliz II                             | A     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 1 61                                                                                                                                                  | Christian Ethics                                | A-    | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| Certificate of Tree Planting Attached.                                                                                                                |                                                 |       |         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 2nd Sem 1977-78                                                                                                                                       |                                                 |       |         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 22                                                                                                                                                    | Writgs of Fil in Span                           | A     | 3       |       | <p>Graduated on March 19, 1978 with the degree of Bachelor of Science in Chemistry.</p> <p>Pursuant to Par. 3 of Department Order No. 61, s. 1975 of the Secretary of Education &amp; Culture dated Dec. 8, 1975, " - - - member-schools of approved accrediting associations, e.g., the PAASCU, may be allowed to graduate students who have completed all requirements for graduation of a duly accredited course without the necessity of the special orders herein called for."</p> <p>The B.S.Chem. program of Silliman University is one of the course-programs duly accredited (accrediting date - March 1970) by PAASCU, and as such, the student is deemed graduated in conformity with the said Department Order.</p> |       |       |         |       |  |
| 65                                                                                                                                                    | Sem                                             | A-    | 1       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 78                                                                                                                                                    | Adv Org Chem                                    | A     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 81                                                                                                                                                    | Adv Inorg Chem                                  | A     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 92                                                                                                                                                    | Indust Org Chem                                 | A-    | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| 98                                                                                                                                                    | Undergrad Thesis                                | B     | 3       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| HONORS AWARDED: Class Honors 1978                                                                                                                     |                                                 |       |         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| AP                                                                                                                                                    | Youth Civic Action Program Completion Certified |       |         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |
| THIS IS TO CERTIFY THAT DOCUMENTS AND SCIENCE STAMPS IN THE AMOUNT OF SIXTY ENTAPOS (P60) HAVE BEEN ATTACHED TO INDICATE NECESSARY AND DULY CANCELLED |                                                 |       |         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |       |         |       |  |

Unless signed by the Registrar and sealed this record is only a statement of the student's progress to date and not an official transcript.

R. R. DATO Registrar APR 26 1979 Date

| School Year          | 1st | 2nd | Sum | 1st | 2nd | Sum | 1st | 2nd | Sum | 1st | 2nd | Sum | 1st | 2nd | Sum | 1st | 2nd | Sum |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Term                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Unit Load            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Term QPA             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Cumulative Unit Load |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Cumulative QPA       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

The student is in GOOD STANDING (granted transfer credential) unless otherwise indicated on the transcript.

REMARKS: 2nd copy.

EMETERIA P. LEE University Registrar University of the Philippines

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JANSALIN, JACOB GLENN E.



UNIVERSITY OF THE PHILIPPINES  
OFFICE OF THE UNIVERSITY REGISTRAROFFICIAL TRANSCRIPT OF RECORD  
(Revised March 1981)

Name JACOB GLENN FLORA JANSALIN

Student No. 80-47122

## COLLEGIATE RECORD

| COLLEGIATE RECORD                                  |                                             | Grades      |                                   | Credits |
|----------------------------------------------------|---------------------------------------------|-------------|-----------------------------------|---------|
| Course Number                                      | DESCRIPTIVE TITLE OF THE COURSE             | Final       | Reexami-<br>nation/<br>Completion |         |
| COLLEGE OF ARTS AND SCIENCES<br>(Graduate Program) |                                             |             |                                   |         |
| <u>2nd Semester, 1980-1981</u>                     |                                             |             |                                   |         |
| Chem 211                                           | Inorganic Structures. & Reaction Mechanisms | 1.25        |                                   | 3       |
| Chem 220                                           | Instrumental Methods of Analysis            | 2           |                                   | 5       |
| Chem 245                                           | Enzymes                                     | 1.75        |                                   | 3       |
| <u>1st Semester, 1981-1982</u>                     |                                             |             |                                   |         |
| Chem 242                                           | Carbohydrates & Related Systems             | 2           |                                   | 3       |
| Chem 228                                           | Theoretical Analytical Chemistry            | 2           |                                   | 3       |
| Chem 155                                           | Physical Chemistry IV                       | Inc         | 3                                 | 3       |
| Chem 230                                           | Physical Organic Chemistry I                | 2.25        |                                   | 3       |
| Chem 250                                           | Chemical Thermodynamics I                   | 1.75        |                                   | 3       |
| <u>2nd Semester, 1981-1982</u>                     |                                             |             |                                   |         |
| Chem 275                                           | Quantum Chemistry                           | 1.75        |                                   | 3       |
| Chem 257                                           | Chemical Kinetics                           | 1.75        |                                   | 3       |
| Chem 291                                           | Seminar in Inorganic Chemistry              | 1.75        |                                   | 1       |
| <u>Summer, 1982</u>                                |                                             |             |                                   |         |
| Residence                                          |                                             |             |                                   |         |
| <u>1st Semester, 1982-1983</u>                     |                                             |             |                                   |         |
| Chem 294                                           | Seminar in Biochemistry                     | 1.75        |                                   | 1       |
| Chem 300                                           | Master's Thesis                             | In Progress |                                   |         |
| <u>2nd Semester, 1982-1983</u>                     |                                             |             |                                   |         |
| Residence                                          |                                             |             |                                   |         |
| <u>Summer, 1983</u>                                |                                             |             |                                   |         |
| Residence                                          |                                             |             |                                   |         |
| <u>1st Semester, 1983-1984</u>                     |                                             |             |                                   |         |
| Residence                                          |                                             |             |                                   |         |
| <u>2nd Semester, 1983-1984</u>                     |                                             |             |                                   |         |
| Residence                                          |                                             |             |                                   |         |
| <u>Summer, 1984</u>                                |                                             |             |                                   |         |
| Residence                                          |                                             |             |                                   |         |
| <u>1st Semester, 1984-1985</u>                     |                                             |             |                                   |         |
| Residence (Chem 300)                               | Master's Thesis                             | Completed   |                                   | 6       |
| NO ENTRY FOLLOWS                                   |                                             |             |                                   |         |

NO ENTRY FOLLOWS

Remarks

Cleared - April 12, 1985.

Grading System: 1-Excellent; 1.5-Very good; 2-Good; 2.5-Satisfactory; 3-Pass; 4-Conditional failure;  
5-Failure; Inc.-Incomplete.

Credits: One university unit of credit is one hour lecture or recitation each week for the period of a complete semester of 16 to 17 weeks. In all courses, two and a half to three hours of laboratory work, and, in technical courses, three hours of drafting or shop work, are regarded as the equivalent of one hour of recitation or lecture.

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227258





**UNIVERSITY OF SAN CARLOS**  
**Office of the Registrar**

Nasipit, Talamban, 6000 Cebu City, Philippines  
Tel. No. (63 32) 230-0100 local 112, 115, 138  
Fax No. (63 32) 230-0405

ACCREDITED: Charter Member Philippine  
Accrediting Association of  
Schools, Colleges and  
Universities (PAASCU)

SCHOOL CODE: 7078

**OFFICIAL TRANSCRIPT OF RECORDS**

Page 1

**PERSONAL DATA**

Student Name : JANSALIN, JACOB GLENN FLORA  
ID Number : 14107782  
Birthdate : December 08, 1957  
Birthplace : LARENA, SIQUJOR  
Gender : MALE  
Religion : CHRISTIAN  
Citizenship : FILIPINO  
Parent/Spouse : VIVIAN M. JANSALIN  
Address : - APT. 46 VISCA BAYBAY LEYTE PHILIPPINES  
Tel no. :

**PRELIMINARY EDUCATION**

Elementary : TAPON ELEMENTARY SCHOOL Year : 1970  
Secondary : NEGROS ORIENTAL HIGH SCHOOL Year : 1974

**GRADING SYSTEM**

| GRADE           | EQUIVALENT                        | INDICATION |
|-----------------|-----------------------------------|------------|
| 1.0 A+          | 100-95%                           | Excellent  |
| 1.1-1.5 A - A-  | 94-90%                            | Very Good  |
| 1.6-2.5 A- - B- | 89-80%                            | Good       |
| 2.6-3.0 C+ - C  | 79-75%                            | Fair       |
| 5.0 C           | 74                                | Failure    |
| INC             | "Incomplete"                      |            |
| NC              | "No Credit"                       |            |
| W               | "Withdrawal with official notice" |            |
| IP              | In Progress                       |            |
| P               | Passed                            |            |

One collegiate unit of credit is one hour lecture or recitation each week or total of 38 hours in a semester. Three hours laboratory work, drafting, or a shop-work each week or a total of 54 hours a semester are regarded as equivalent also to one unit of credit.

The semestral average grade of a student is computed by multiplying the number of units assigned to a course by the grade earned and the product divided by the total units earned for the semester.

Not valid without  
USC seal

  
**ROMEO E. YAP**  
University Registrar



**UNIVERSITY OF SAN CARLOS**  
**Office of the Registrar**

Nasipit, Talamban, 6000 Cebu City, Philippines  
Tel. No. (63 32) 230-0100 local 112, 115, 138  
Fax No. (63 32) 230-0405

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Schools, Colleges and  
Universities (PAASCU)

SCHOOL CODE: 7078

**OFFICIAL TRANSCRIPT OF RECORDS**

Page 2

Student Name : JANSALIN, JACOB GLENN FLORA

| FIRST SEMESTER 2014-2015  |                                          |       |        |
|---------------------------|------------------------------------------|-------|--------|
| Course                    | Title                                    | Grade | Unit/s |
| CHEM 731.3                | SPECIAL TOPICS IN ANALYTICAL CHEMISTRY 3 | 1.6   | 3.0    |
| CHEM 711.2                | SPECIAL TOPICS IN ORGANIC CHEMISTRY 2    | 1.1   | 3.0    |
| CHEM 761                  | SEMINAR 1                                | 1.5   | 1.0    |
| SECOND SEMESTER 2014-2015 |                                          |       |        |
| CHEM 762                  | SEMINAR 2                                | 1.4   | 1.0    |
| CHEM 711.1                | SPECIAL TOPICS IN ORGANIC CHEMISTRY 1    | 1.4   | 3.0    |
| CHEM 731.1                | SPECIAL TOPICS IN ANALYTICAL CHEMISTRY 1 | 1.8   | 3.0    |
| FIRST SEMESTER 2015-2016  |                                          |       |        |
| CHEM 763                  | SEMINAR 3                                | 1.4   | 1.0    |
| SECOND SEMESTER 2015-2016 |                                          |       |        |
| CHEM 764                  | SEMINAR 4                                |       |        |
| DISS RES                  | DISSERTATION COUNSELLING                 |       |        |

Date Issued : April 2, 2016

Purpose : FOR SCHOLARSHIP APPLICATION

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**ROMEO E. YAP**  
University Registrar





# UNIVERSITY OF SAN CARLOS

## Office of the Registrar

Nasipit, Talamban, 6000 Cebu City, Philippines

Tel. No. (63 32) 230-0100 local 112, 115, 138

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SCHOOL CODE: 7078

## OFFICIAL TRANSCRIPT OF RECORDS

Page \_\_\_\_\_

NAME: JACOB GILSON P. ZARULLAN Date: 1974-1975 Date Awarded: March 20, 1979

Year of Birth: December 8, 1957 Title: Student Date Granted: 1974

Home Address: 406 Davao Street, Zamboanga Major: Science Minor: Math

Other Name(s) or Nickname(s): \_\_\_\_\_

Primary: Not Indicated in Form 157-A

Intermediate: St. Ignace Elementary School - 1970

High School: St. Ignace High School - 1974

| Grade                 | Title                 | Grade | Course  | Grade                  | Title | Grade | Course |
|-----------------------|-----------------------|-------|---------|------------------------|-------|-------|--------|
| 1st Sem 1974-75       |                       |       |         | 2nd Sem 1975-76        |       |       |        |
| Math 11               | Math 11               | 3     | Math 41 | Integral Calc          | B-    | 3     |        |
| Math 12               | Math 12               | 3     | Math 42 | Calculus               | A-    | 3     |        |
| Gen Chem I            | Gen Chem I            | 4     | Math 50 | App Calc & Probability | A-    | 3     |        |
| Gen Chem II           | Gen Chem II           | 4     | Math 51 | Math 51                | A     | 3     |        |
| Gen Physics I         | Gen Physics I         | 4     | Math 52 | Math 52                | A     | 3     |        |
| Gen Physics II        | Gen Physics II        | 4     |         |                        |       |       |        |
| Gen Chem III          | Gen Chem III          | 4     |         |                        |       |       |        |
| Gen Chem IV           | Gen Chem IV           | 4     |         |                        |       |       |        |
| Gen Chem V            | Gen Chem V            | 4     |         |                        |       |       |        |
| Gen Chem VI           | Gen Chem VI           | 4     |         |                        |       |       |        |
| Gen Chem VII          | Gen Chem VII          | 4     |         |                        |       |       |        |
| Gen Chem VIII         | Gen Chem VIII         | 4     |         |                        |       |       |        |
| Gen Chem IX           | Gen Chem IX           | 4     |         |                        |       |       |        |
| Gen Chem X            | Gen Chem X            | 4     |         |                        |       |       |        |
| Gen Chem XI           | Gen Chem XI           | 4     |         |                        |       |       |        |
| Gen Chem XII          | Gen Chem XII          | 4     |         |                        |       |       |        |
| Gen Chem XIII         | Gen Chem XIII         | 4     |         |                        |       |       |        |
| Gen Chem XIV          | Gen Chem XIV          | 4     |         |                        |       |       |        |
| Gen Chem XV           | Gen Chem XV           | 4     |         |                        |       |       |        |
| Gen Chem XVI          | Gen Chem XVI          | 4     |         |                        |       |       |        |
| Gen Chem XVII         | Gen Chem XVII         | 4     |         |                        |       |       |        |
| Gen Chem XVIII        | Gen Chem XVIII        | 4     |         |                        |       |       |        |
| Gen Chem XIX          | Gen Chem XIX          | 4     |         |                        |       |       |        |
| Gen Chem XX           | Gen Chem XX           | 4     |         |                        |       |       |        |
| Gen Chem XXI          | Gen Chem XXI          | 4     |         |                        |       |       |        |
| Gen Chem XXII         | Gen Chem XXII         | 4     |         |                        |       |       |        |
| Gen Chem XXIII        | Gen Chem XXIII        | 4     |         |                        |       |       |        |
| Gen Chem XXIV         | Gen Chem XXIV         | 4     |         |                        |       |       |        |
| Gen Chem XXV          | Gen Chem XXV          | 4     |         |                        |       |       |        |
| Gen Chem XXVI         | Gen Chem XXVI         | 4     |         |                        |       |       |        |
| Gen Chem XXVII        | Gen Chem XXVII        | 4     |         |                        |       |       |        |
| Gen Chem XXVIII       | Gen Chem XXVIII       | 4     |         |                        |       |       |        |
| Gen Chem XXIX         | Gen Chem XXIX         | 4     |         |                        |       |       |        |
| Gen Chem XXX          | Gen Chem XXX          | 4     |         |                        |       |       |        |
| Gen Chem XXXI         | Gen Chem XXXI         | 4     |         |                        |       |       |        |
| Gen Chem XXXII        | Gen Chem XXXII        | 4     |         |                        |       |       |        |
| Gen Chem XXXIII       | Gen Chem XXXIII       | 4     |         |                        |       |       |        |
| Gen Chem XXXIV        | Gen Chem XXXIV        | 4     |         |                        |       |       |        |
| Gen Chem XXXV         | Gen Chem XXXV         | 4     |         |                        |       |       |        |
| Gen Chem XXXVI        | Gen Chem XXXVI        | 4     |         |                        |       |       |        |
| Gen Chem XXXVII       | Gen Chem XXXVII       | 4     |         |                        |       |       |        |
| Gen Chem XXXVIII      | Gen Chem XXXVIII      | 4     |         |                        |       |       |        |
| Gen Chem XXXIX        | Gen Chem XXXIX        | 4     |         |                        |       |       |        |
| Gen Chem XL           | Gen Chem XL           | 4     |         |                        |       |       |        |
| Gen Chem XLI          | Gen Chem XLI          | 4     |         |                        |       |       |        |
| Gen Chem XLII         | Gen Chem XLII         | 4     |         |                        |       |       |        |
| Gen Chem XLIII        | Gen Chem XLIII        | 4     |         |                        |       |       |        |
| Gen Chem XLIV         | Gen Chem XLIV         | 4     |         |                        |       |       |        |
| Gen Chem XLV          | Gen Chem XLV          | 4     |         |                        |       |       |        |
| Gen Chem XLVI         | Gen Chem XLVI         | 4     |         |                        |       |       |        |
| Gen Chem XLVII        | Gen Chem XLVII        | 4     |         |                        |       |       |        |
| Gen Chem XLVIII       | Gen Chem XLVIII       | 4     |         |                        |       |       |        |
| Gen Chem XLIX         | Gen Chem XLIX         | 4     |         |                        |       |       |        |
| Gen Chem L            | Gen Chem L            | 4     |         |                        |       |       |        |
| Gen Chem LI           | Gen Chem LI           | 4     |         |                        |       |       |        |
| Gen Chem LII          | Gen Chem LII          | 4     |         |                        |       |       |        |
| Gen Chem LIII         | Gen Chem LIII         | 4     |         |                        |       |       |        |
| Gen Chem LIV          | Gen Chem LIV          | 4     |         |                        |       |       |        |
| Gen Chem LV           | Gen Chem LV           | 4     |         |                        |       |       |        |
| Gen Chem LVI          | Gen Chem LVI          | 4     |         |                        |       |       |        |
| Gen Chem LVII         | Gen Chem LVII         | 4     |         |                        |       |       |        |
| Gen Chem LVIII        | Gen Chem LVIII        | 4     |         |                        |       |       |        |
| Gen Chem LIX          | Gen Chem LIX          | 4     |         |                        |       |       |        |
| Gen Chem LX           | Gen Chem LX           | 4     |         |                        |       |       |        |
| Gen Chem LXI          | Gen Chem LXI          | 4     |         |                        |       |       |        |
| Gen Chem LXII         | Gen Chem LXII         | 4     |         |                        |       |       |        |
| Gen Chem LXIII        | Gen Chem LXIII        | 4     |         |                        |       |       |        |
| Gen Chem LXIV         | Gen Chem LXIV         | 4     |         |                        |       |       |        |
| Gen Chem LXV          | Gen Chem LXV          | 4     |         |                        |       |       |        |
| Gen Chem LXVI         | Gen Chem LXVI         | 4     |         |                        |       |       |        |
| Gen Chem LXVII        | Gen Chem LXVII        | 4     |         |                        |       |       |        |
| Gen Chem LXVIII       | Gen Chem LXVIII       | 4     |         |                        |       |       |        |
| Gen Chem LXIX         | Gen Chem LXIX         | 4     |         |                        |       |       |        |
| Gen Chem LXX          | Gen Chem LXX          | 4     |         |                        |       |       |        |
| Gen Chem LXXI         | Gen Chem LXXI         | 4     |         |                        |       |       |        |
| Gen Chem LXXII        | Gen Chem LXXII        | 4     |         |                        |       |       |        |
| Gen Chem LXXIII       | Gen Chem LXXIII       | 4     |         |                        |       |       |        |
| Gen Chem LXXIV        | Gen Chem LXXIV        | 4     |         |                        |       |       |        |
| Gen Chem LXXV         | Gen Chem LXXV         | 4     |         |                        |       |       |        |
| Gen Chem LXXVI        | Gen Chem LXXVI        | 4     |         |                        |       |       |        |
| Gen Chem LXXVII       | Gen Chem LXXVII       | 4     |         |                        |       |       |        |
| Gen Chem LXXVIII      | Gen Chem LXXVIII      | 4     |         |                        |       |       |        |
| Gen Chem LXXIX        | Gen Chem LXXIX        | 4     |         |                        |       |       |        |
| Gen Chem LXXX         | Gen Chem LXXX         | 4     |         |                        |       |       |        |
| Gen Chem LXXXI        | Gen Chem LXXXI        | 4     |         |                        |       |       |        |
| Gen Chem LXXXII       | Gen Chem LXXXII       | 4     |         |                        |       |       |        |
| Gen Chem LXXXIII      | Gen Chem LXXXIII      | 4     |         |                        |       |       |        |
| Gen Chem LXXXIV       | Gen Chem LXXXIV       | 4     |         |                        |       |       |        |
| Gen Chem LXXXV        | Gen Chem LXXXV        | 4     |         |                        |       |       |        |
| Gen Chem LXXXVI       | Gen Chem LXXXVI       | 4     |         |                        |       |       |        |
| Gen Chem LXXXVII      | Gen Chem LXXXVII      | 4     |         |                        |       |       |        |
| Gen Chem LXXXVIII     | Gen Chem LXXXVIII     | 4     |         |                        |       |       |        |
| Gen Chem LXXXIX       | Gen Chem LXXXIX       | 4     |         |                        |       |       |        |
| Gen Chem LXXXX        | Gen Chem LXXXX        | 4     |         |                        |       |       |        |
| Gen Chem LXXXXI       | Gen Chem LXXXXI       | 4     |         |                        |       |       |        |
| Gen Chem LXXXXII      | Gen Chem LXXXXII      | 4     |         |                        |       |       |        |
| Gen Chem LXXXXIII     | Gen Chem LXXXXIII     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXIV      | Gen Chem LXXXXIV      | 4     |         |                        |       |       |        |
| Gen Chem LXXXXV       | Gen Chem LXXXXV       | 4     |         |                        |       |       |        |
| Gen Chem LXXXXVI      | Gen Chem LXXXXVI      | 4     |         |                        |       |       |        |
| Gen Chem LXXXXVII     | Gen Chem LXXXXVII     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXVIII    | Gen Chem LXXXXVIII    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXIX      | Gen Chem LXXXXIX      | 4     |         |                        |       |       |        |
| Gen Chem LXXXXX       | Gen Chem LXXXXX       | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXI      | Gen Chem LXXXXXI      | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXII     | Gen Chem LXXXXXII     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXIII    | Gen Chem LXXXXXIII    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXIV     | Gen Chem LXXXXXIV     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXV      | Gen Chem LXXXXXV      | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXVI     | Gen Chem LXXXXXVI     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXVII    | Gen Chem LXXXXXVII    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXVIII   | Gen Chem LXXXXXVIII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXIX     | Gen Chem LXXXXXIX     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXX      | Gen Chem LXXXXXX      | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXI     | Gen Chem LXXXXXXI     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXII    | Gen Chem LXXXXXXII    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXIII   | Gen Chem LXXXXXXIII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXIV    | Gen Chem LXXXXXXIV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXV     | Gen Chem LXXXXXXV     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXVI    | Gen Chem LXXXXXXVI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXVII   | Gen Chem LXXXXXXVII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXVIII  | Gen Chem LXXXXXXVIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXIX    | Gen Chem LXXXXXXIX    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXX     | Gen Chem LXXXXXXX     | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXI    | Gen Chem LXXXXXXXI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIX   | Gen Chem LXXXXXXXIX   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXI    | Gen Chem LXXXXXXXI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXI    | Gen Chem LXXXXXXXI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIX   | Gen Chem LXXXXXXXIX   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXI    | Gen Chem LXXXXXXXI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIX   | Gen Chem LXXXXXXXIX   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXI    | Gen Chem LXXXXXXXI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIX   | Gen Chem LXXXXXXXIX   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXI    | Gen Chem LXXXXXXXI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIX   | Gen Chem LXXXXXXXIX   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXI    | Gen Chem LXXXXXXXI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIX   | Gen Chem LXXXXXXXIX   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXI    | Gen Chem LXXXXXXXI    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXII   | Gen Chem LXXXXXXXII   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIII  | Gen Chem LXXXXXXXIII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXV    | Gen Chem LXXXXXXXV    | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVII  | Gen Chem LXXXXXXXVII  | 4     |         |                        |       |       |        |
| Gen Chem LXXXXXXXVIII | Gen Chem LXXXXXXXVIII | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXIV   | Gen Chem LXXXXXXXIV   | 4     |         |                        |       |       |        |
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| Gen Chem LXXXXXXXVI   | Gen Chem LXXXXXXXVI   | 4     |         |                        |       |       |        |



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SCHOOL CODE: 7078

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[illegible]

Article signed by the president and dated 1955, refers to only a withdrawal of the nuclear program to date and not an official renunciation.

W. R. H. H. H.

APR 26 1977

|                        |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Model Year             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Year                   | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |  |  |
| Gas Load               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Flow GPM               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Compressor On/Off Load |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Compressor On/Off      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

11. *Journal of the American Statistical Association*, 93, 1998, 1025-1032.

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OFFICIAL TRANSCRIPT OF RECORDS  
(Issued October 1988)

Name: JANSALYN JACOB GLENN FLORA

Enrollment No. BS-47322

| Course Number                                        | DESCRIPTIVE TITLE OF THE COURSE             | Credits |     |         |
|------------------------------------------------------|---------------------------------------------|---------|-----|---------|
|                                                      |                                             | Total   | Lab | Grading |
| COLLEGE OF ARTS AND SCIENCES<br>(Bachelor's Program) |                                             |         |     |         |
| 1st Semester, 1980-1981<br>Chem 241                  | General, Inorganic and Analytical Chemistry | 3.00    |     |         |
| 2nd Semester, 1981-1982<br>Chem 242                  | Physical Chemistry I                        | 3.75    |     |         |
| 3rd Semester, 1982-1983<br>Chem 243                  | Physical Chemistry II                       | 3.00    | 2   | 3       |
| 4th Semester, 1983-1984<br>Chem 244                  | Physical Chemistry III                      | 2.00    |     | 3       |
| 5th Semester, 1984-1985<br>Chem 245                  | Physical Chemistry IV                       | 2.00    |     | 3       |
| 6th Semester, 1985-1986<br>Chem 246                  | Physical Chemistry V                        | 3.00    |     |         |
| 7th Semester, 1986-1987<br>Chem 247                  | Physical Chemistry VI                       | 3.00    |     |         |
| 8th Semester, 1987-1988<br>Chem 248                  | Physical Chemistry VII                      | 3.00    |     |         |
| 9th Semester, 1988-1989<br>Chem 249                  | Physical Chemistry VIII                     | 3.00    |     |         |
| 10th Semester, 1989-1990<br>Chem 250                 | Physical Chemistry IX                       | 3.00    |     |         |
| 11th Semester, 1990-1991<br>Chem 251                 | Physical Chemistry X                        | 3.00    |     |         |
| 12th Semester, 1991-1992<br>Chem 252                 | Physical Chemistry XI                       | 3.00    |     |         |
| 13th Semester, 1992-1993<br>Chem 253                 | Physical Chemistry XII                      | 3.00    |     |         |
| 14th Semester, 1993-1994<br>Chem 254                 | Physical Chemistry XIII                     | 3.00    |     |         |
| 15th Semester, 1994-1995<br>Chem 255                 | Physical Chemistry XIV                      | 3.00    |     |         |
| 16th Semester, 1995-1996<br>Chem 256                 | Physical Chemistry XV                       | 3.00    |     |         |
| 17th Semester, 1996-1997<br>Chem 257                 | Physical Chemistry XVI                      | 3.00    |     |         |
| 18th Semester, 1997-1998<br>Chem 258                 | Physical Chemistry XVII                     | 3.00    |     |         |
| 19th Semester, 1998-1999<br>Chem 259                 | Physical Chemistry XVIII                    | 3.00    |     |         |
| 20th Semester, 1999-2000<br>Chem 260                 | Physical Chemistry XIX                      | 3.00    |     |         |
| 21st Semester, 2000-2001<br>Chem 261                 | Physical Chemistry XX                       | 3.00    |     |         |
| 22nd Semester, 2001-2002<br>Chem 262                 | Physical Chemistry XXI                      | 3.00    |     |         |
| 23rd Semester, 2002-2003<br>Chem 263                 | Physical Chemistry XXII                     | 3.00    |     |         |
| 24th Semester, 2003-2004<br>Chem 264                 | Physical Chemistry XXIII                    | 3.00    |     |         |
| 25th Semester, 2004-2005<br>Chem 265                 | Physical Chemistry XXIV                     | 3.00    |     |         |
| 26th Semester, 2005-2006<br>Chem 266                 | Physical Chemistry XXV                      | 3.00    |     |         |
| 27th Semester, 2006-2007<br>Chem 267                 | Physical Chemistry XXVI                     | 3.00    |     |         |
| 28th Semester, 2007-2008<br>Chem 268                 | Physical Chemistry XXVII                    | 3.00    |     |         |
| 29th Semester, 2008-2009<br>Chem 269                 | Physical Chemistry XXVIII                   | 3.00    |     |         |
| 30th Semester, 2009-2010<br>Chem 270                 | Physical Chemistry XXIX                     | 3.00    |     |         |
| 31st Semester, 2010-2011<br>Chem 271                 | Physical Chemistry XXX                      | 3.00    |     |         |
| 32nd Semester, 2011-2012<br>Chem 272                 | Physical Chemistry XXXI                     | 3.00    |     |         |
| 33rd Semester, 2012-2013<br>Chem 273                 | Physical Chemistry XXXII                    | 3.00    |     |         |
| 34th Semester, 2013-2014<br>Chem 274                 | Physical Chemistry XXXIII                   | 3.00    |     |         |
| 35th Semester, 2014-2015<br>Chem 275                 | Physical Chemistry XXXIV                    | 3.00    |     |         |
| 36th Semester, 2015-2016<br>Chem 276                 | Physical Chemistry XXXV                     | 3.00    |     |         |
| 37th Semester, 2016-2017<br>Chem 277                 | Physical Chemistry XXXVI                    | 3.00    |     |         |
| 38th Semester, 2017-2018<br>Chem 278                 | Physical Chemistry XXXVII                   | 3.00    |     |         |
| 39th Semester, 2018-2019<br>Chem 279                 | Physical Chemistry XXXVIII                  | 3.00    |     |         |
| 40th Semester, 2019-2020<br>Chem 280                 | Physical Chemistry XXXIX                    | 3.00    |     |         |
| 41st Semester, 2020-2021<br>Chem 281                 | Physical Chemistry XL                       | 3.00    |     |         |
| 42nd Semester, 2021-2022<br>Chem 282                 | Physical Chemistry XLI                      | 3.00    |     |         |
| 43rd Semester, 2022-2023<br>Chem 283                 | Physical Chemistry XLII                     | 3.00    |     |         |
| 44th Semester, 2023-2024<br>Chem 284                 | Physical Chemistry XLIII                    | 3.00    |     |         |
| 45th Semester, 2024-2025<br>Chem 285                 | Physical Chemistry XLIV                     | 3.00    |     |         |
| 46th Semester, 2025-2026<br>Chem 286                 | Physical Chemistry XLV                      | 3.00    |     |         |
| 47th Semester, 2026-2027<br>Chem 287                 | Physical Chemistry XLVI                     | 3.00    |     |         |
| 48th Semester, 2027-2028<br>Chem 288                 | Physical Chemistry XLVII                    | 3.00    |     |         |
| 49th Semester, 2028-2029<br>Chem 289                 | Physical Chemistry XLVIII                   | 3.00    |     |         |
| 50th Semester, 2029-2030<br>Chem 290                 | Physical Chemistry XLIX                     | 3.00    |     |         |
| 51st Semester, 2030-2031<br>Chem 291                 | Physical Chemistry L                        | 3.00    |     |         |
| 52nd Semester, 2031-2032<br>Chem 292                 | Physical Chemistry LI                       | 3.00    |     |         |
| 53rd Semester, 2032-2033<br>Chem 293                 | Physical Chemistry LII                      | 3.00    |     |         |
| 54th Semester, 2033-2034<br>Chem 294                 | Physical Chemistry LIII                     | 3.00    |     |         |
| 55th Semester, 2034-2035<br>Chem 295                 | Physical Chemistry LIV                      | 3.00    |     |         |
| 56th Semester, 2035-2036<br>Chem 296                 | Physical Chemistry LV                       | 3.00    |     |         |
| 57th Semester, 2036-2037<br>Chem 297                 | Physical Chemistry LVI                      | 3.00    |     |         |
| 58th Semester, 2037-2038<br>Chem 298                 | Physical Chemistry LVII                     | 3.00    |     |         |
| 59th Semester, 2038-2039<br>Chem 299                 | Physical Chemistry LVIII                    | 3.00    |     |         |
| 60th Semester, 2039-2040<br>Chem 300                 | Physical Chemistry LIX                      | 3.00    |     |         |
| 61st Semester, 2040-2041<br>Chem 301                 | Physical Chemistry LX                       | 3.00    |     |         |
| 62nd Semester, 2041-2042<br>Chem 302                 | Physical Chemistry LXI                      | 3.00    |     |         |
| 63rd Semester, 2042-2043<br>Chem 303                 | Physical Chemistry LXII                     | 3.00    |     |         |
| 64th Semester, 2043-2044<br>Chem 304                 | Physical Chemistry LXIII                    | 3.00    |     |         |
| 65th Semester, 2044-2045<br>Chem 305                 | Physical Chemistry LXIV                     | 3.00    |     |         |
| 66th Semester, 2045-2046<br>Chem 306                 | Physical Chemistry LXV                      | 3.00    |     |         |
| 67th Semester, 2046-2047<br>Chem 307                 | Physical Chemistry LXVI                     | 3.00    |     |         |
| 68th Semester, 2047-2048<br>Chem 308                 | Physical Chemistry LXVII                    | 3.00    |     |         |
| 69th Semester, 2048-2049<br>Chem 309                 | Physical Chemistry LXVIII                   | 3.00    |     |         |
| 70th Semester, 2049-2050<br>Chem 310                 | Physical Chemistry LXIX                     | 3.00    |     |         |
| 71st Semester, 2050-2051<br>Chem 311                 | Physical Chemistry LXX                      | 3.00    |     |         |
| 72nd Semester, 2051-2052<br>Chem 312                 | Physical Chemistry LXXI                     | 3.00    |     |         |
| 73rd Semester, 2052-2053<br>Chem 313                 | Physical Chemistry LXXII                    | 3.00    |     |         |
| 74th Semester, 2053-2054<br>Chem 314                 | Physical Chemistry LXXIII                   | 3.00    |     |         |
| 75th Semester, 2054-2055<br>Chem 315                 | Physical Chemistry LXXIV                    | 3.00    |     |         |
| 76th Semester, 2055-2056<br>Chem 316                 | Physical Chemistry LXXV                     | 3.00    |     |         |
| 77th Semester, 2056-2057<br>Chem 317                 | Physical Chemistry LXXVI                    | 3.00    |     |         |
| 78th Semester, 2057-2058<br>Chem 318                 | Physical Chemistry LXXVII                   | 3.00    |     |         |
| 79th Semester, 2058-2059<br>Chem 319                 | Physical Chemistry LXXVIII                  | 3.00    |     |         |
| 80th Semester, 2059-2060<br>Chem 320                 | Physical Chemistry LXXIX                    | 3.00    |     |         |
| 81st Semester, 2060-2061<br>Chem 321                 | Physical Chemistry LXXX                     | 3.00    |     |         |
| 82nd Semester, 2061-2062<br>Chem 322                 | Physical Chemistry LXXXI                    | 3.00    |     |         |
| 83rd Semester, 2062-2063<br>Chem 323                 | Physical Chemistry LXXXII                   | 3.00    |     |         |
| 84th Semester, 2063-2064<br>Chem 324                 | Physical Chemistry LXXXIII                  | 3.00    |     |         |
| 85th Semester, 2064-2065<br>Chem 325                 | Physical Chemistry LXXXIV                   | 3.00    |     |         |
| 86th Semester, 2065-2066<br>Chem 326                 | Physical Chemistry LXXXV                    | 3.00    |     |         |
| 87th Semester, 2066-2067<br>Chem 327                 | Physical Chemistry LXXXVI                   | 3.00    |     |         |
| 88th Semester, 2067-2068<br>Chem 328                 | Physical Chemistry LXXXVII                  | 3.00    |     |         |
| 89th Semester, 2068-2069<br>Chem 329                 | Physical Chemistry LXXXVIII                 | 3.00    |     |         |
| 90th Semester, 2069-2070<br>Chem 330                 | Physical Chemistry LXXXIX                   | 3.00    |     |         |
| 91st Semester, 2070-2071<br>Chem 331                 | Physical Chemistry LXXXX                    | 3.00    |     |         |
| 92nd Semester, 2071-2072<br>Chem 332                 | Physical Chemistry LXXXXI                   | 3.00    |     |         |
| 93rd Semester, 2072-2073<br>Chem 333                 | Physical Chemistry LXXXXII                  | 3.00    |     |         |
| 94th Semester, 2073-2074<br>Chem 334                 | Physical Chemistry LXXXXIII                 | 3.00    |     |         |
| 95th Semester, 2074-2075<br>Chem 335                 | Physical Chemistry LXXXXIV                  | 3.00    |     |         |
| 96th Semester, 2075-2076<br>Chem 336                 | Physical Chemistry LXXXXV                   | 3.00    |     |         |
| 97th Semester, 2076-2077<br>Chem 337                 | Physical Chemistry LXXXXVI                  | 3.00    |     |         |
| 98th Semester, 2077-2078<br>Chem 338                 | Physical Chemistry LXXXXVII                 | 3.00    |     |         |
| 99th Semester, 2078-2079<br>Chem 339                 | Physical Chemistry LXXXXVIII                | 3.00    |     |         |
| 100th Semester, 2079-2080<br>Chem 340                | Physical Chemistry LXXXXIX                  | 3.00    |     |         |
| 101st Semester, 2080-2081<br>Chem 341                | Physical Chemistry LXXXXX                   | 3.00    |     |         |
| 102nd Semester, 2081-2082<br>Chem 342                | Physical Chemistry LXXXXXI                  | 3.00    |     |         |
| 103rd Semester, 2082-2083<br>Chem 343                | Physical Chemistry LXXXXXII                 | 3.00    |     |         |
| 104th Semester, 2083-2084<br>Chem 344                | Physical Chemistry LXXXXXIII                | 3.00    |     |         |
| 105th Semester, 2084-2085<br>Chem 345                | Physical Chemistry LXXXXXIV                 | 3.00    |     |         |
| 106th Semester, 2085-2086<br>Chem 346                | Physical Chemistry LXXXXXV                  | 3.00    |     |         |
| 107th Semester, 2086-2087<br>Chem 347                | Physical Chemistry LXXXXXVI                 | 3.00    |     |         |
| 108th Semester, 2087-2088<br>Chem 348                | Physical Chemistry LXXXXXVII                | 3.00    |     |         |
| 109th Semester, 2088-2089<br>Chem 349                | Physical Chemistry LXXXXXVIII               | 3.00    |     |         |
| 110th Semester, 2089-2090<br>Chem 350                | Physical Chemistry LXXXXXIX                 | 3.00    |     |         |
| 111th Semester, 2090-2091<br>Chem 351                | Physical Chemistry LXXXXXX                  | 3.00    |     |         |
| 112th Semester, 2091-2092<br>Chem 352                | Physical Chemistry LXXXXXXI                 | 3.00    |     |         |
| 113th Semester, 2092-2093<br>Chem 353                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 114th Semester, 2093-2094<br>Chem 354                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 115th Semester, 2094-2095<br>Chem 355                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 116th Semester, 2095-2096<br>Chem 356                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 117th Semester, 2096-2097<br>Chem 357                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 118th Semester, 2097-2098<br>Chem 358                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 119th Semester, 2098-2099<br>Chem 359                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 120th Semester, 2099-2100<br>Chem 360                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 121st Semester, 2100-2101<br>Chem 361                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 122nd Semester, 2101-2102<br>Chem 362                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 123rd Semester, 2102-2103<br>Chem 363                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 124th Semester, 2103-2104<br>Chem 364                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 125th Semester, 2104-2105<br>Chem 365                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 126th Semester, 2105-2106<br>Chem 366                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 127th Semester, 2106-2107<br>Chem 367                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 128th Semester, 2107-2108<br>Chem 368                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 129th Semester, 2108-2109<br>Chem 369                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 130th Semester, 2109-2110<br>Chem 370                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 131st Semester, 2110-2111<br>Chem 371                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 132nd Semester, 2111-2112<br>Chem 372                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 133rd Semester, 2112-2113<br>Chem 373                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 134th Semester, 2113-2114<br>Chem 374                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 135th Semester, 2114-2115<br>Chem 375                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 136th Semester, 2115-2116<br>Chem 376                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 137th Semester, 2116-2117<br>Chem 377                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 138th Semester, 2117-2118<br>Chem 378                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 139th Semester, 2118-2119<br>Chem 379                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 140th Semester, 2119-2120<br>Chem 380                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 141st Semester, 2120-2121<br>Chem 381                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 142nd Semester, 2121-2122<br>Chem 382                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 143rd Semester, 2122-2123<br>Chem 383                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 144th Semester, 2123-2124<br>Chem 384                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 145th Semester, 2124-2125<br>Chem 385                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 146th Semester, 2125-2126<br>Chem 386                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 147th Semester, 2126-2127<br>Chem 387                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 148th Semester, 2127-2128<br>Chem 388                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 149th Semester, 2128-2129<br>Chem 389                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 150th Semester, 2129-2130<br>Chem 390                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 151st Semester, 2130-2131<br>Chem 391                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 152nd Semester, 2131-2132<br>Chem 392                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 153rd Semester, 2132-2133<br>Chem 393                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 154th Semester, 2133-2134<br>Chem 394                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 155th Semester, 2134-2135<br>Chem 395                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 156th Semester, 2135-2136<br>Chem 396                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 157th Semester, 2136-2137<br>Chem 397                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 158th Semester, 2137-2138<br>Chem 398                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 159th Semester, 2138-2139<br>Chem 399                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 160th Semester, 2139-2140<br>Chem 400                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 161st Semester, 2140-2141<br>Chem 401                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 162nd Semester, 2141-2142<br>Chem 402                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 163rd Semester, 2142-2143<br>Chem 403                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 164th Semester, 2143-2144<br>Chem 404                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 165th Semester, 2144-2145<br>Chem 405                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 166th Semester, 2145-2146<br>Chem 406                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 167th Semester, 2146-2147<br>Chem 407                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 168th Semester, 2147-2148<br>Chem 408                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 169th Semester, 2148-2149<br>Chem 409                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 170th Semester, 2149-2150<br>Chem 410                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 171st Semester, 2150-2151<br>Chem 411                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 172nd Semester, 2151-2152<br>Chem 412                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 173rd Semester, 2152-2153<br>Chem 413                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 174th Semester, 2153-2154<br>Chem 414                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 175th Semester, 2154-2155<br>Chem 415                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 176th Semester, 2155-2156<br>Chem 416                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 177th Semester, 2156-2157<br>Chem 417                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 178th Semester, 2157-2158<br>Chem 418                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 179th Semester, 2158-2159<br>Chem 419                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 180th Semester, 2159-2160<br>Chem 420                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 181st Semester, 2160-2161<br>Chem 421                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 182nd Semester, 2161-2162<br>Chem 422                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 183rd Semester, 2162-2163<br>Chem 423                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 184th Semester, 2163-2164<br>Chem 424                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 185th Semester, 2164-2165<br>Chem 425                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 186th Semester, 2165-2166<br>Chem 426                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 187th Semester, 2166-2167<br>Chem 427                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 188th Semester, 2167-2168<br>Chem 428                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 189th Semester, 2168-2169<br>Chem 429                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 190th Semester, 2169-2170<br>Chem 430                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 191st Semester, 2170-2171<br>Chem 431                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 192nd Semester, 2171-2172<br>Chem 432                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 193rd Semester, 2172-2173<br>Chem 433                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 194th Semester, 2173-2174<br>Chem 434                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 195th Semester, 2174-2175<br>Chem 435                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 196th Semester, 2175-2176<br>Chem 436                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 197th Semester, 2176-2177<br>Chem 437                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 198th Semester, 2177-2178<br>Chem 438                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 199th Semester, 2178-2179<br>Chem 439                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 200th Semester, 2179-2180<br>Chem 440                | Physical Chemistry LXXXXXXIX                | 3.00    |     |         |
| 201st Semester, 2180-2181<br>Chem 441                | Physical Chemistry LXXXXXXX                 | 3.00    |     |         |
| 202nd Semester, 2181-2182<br>Chem 442                | Physical Chemistry LXXXXXXXI                | 3.00    |     |         |
| 203rd Semester, 2182-2183<br>Chem 443                | Physical Chemistry LXXXXXXII                | 3.00    |     |         |
| 204th Semester, 2183-2184<br>Chem 444                | Physical Chemistry LXXXXXXIII               | 3.00    |     |         |
| 205th Semester, 2184-2185<br>Chem 445                | Physical Chemistry LXXXXXXIV                | 3.00    |     |         |
| 206th Semester, 2185-2186<br>Chem 446                | Physical Chemistry LXXXXXXV                 | 3.00    |     |         |
| 207th Semester, 2186-2187<br>Chem 447                | Physical Chemistry LXXXXXXVI                | 3.00    |     |         |
| 208th Semester, 2187-2188<br>Chem 448                | Physical Chemistry LXXXXXXVII               | 3.00    |     |         |
| 209th Semester, 2188-2189<br>Chem 449                | Physical Chemistry LXXXXXXVIII              | 3.00    |     |         |
| 210th Semester, 2                                    |                                             |         |     |         |





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SCHOOL CODE: 7078

OFFICIAL TRANSCRIPT OF RECORDS

UNIVERSITY OF THE PHILIPPINES-DILMAN  
OFFICE OF THE UNIVERSITY REGISTRAR

OFFICIAL TRANSCRIPT OF RECORDS  
Diploma Number 1990

Name: **SANSALIN, JACOB GLENN FLORA**  
Student No.: **90-41111**

| Course Number                        | DESCRIPTIVE TITLE OF THE COURSE  | Final | Grade | Credits |
|--------------------------------------|----------------------------------|-------|-------|---------|
| DOCTORAL PROGRAM                     |                                  |       |       |         |
| 1st Semester, 1992-1994<br>Chem 215  | Theoretical Analytical Chemistry | 1.75  |       | 3       |
| Chem 216                             | Theoretical Organic Chemistry    | 1.25  |       | 3       |
| Chem 217                             | Organic Acids and Phosphorus     | 1.25  |       | 3       |
| Chem 218                             | Organic Chemistry                | 1.25  |       | 3       |
| 2nd Semester, 1992-1994<br>Chem 219  | Organic Chemistry                | 1.25  |       | 3       |
| Chem 220                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 221                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 222                             | Organic Chemistry                | 1.25  |       | 3       |
| 3rd Semester, 1994-1996<br>Chem 223  | Organic Chemistry                | 1.25  |       | 3       |
| Chem 224                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 225                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 226                             | Organic Chemistry                | 1.25  |       | 3       |
| 4th Semester, 1996-1998<br>Chem 227  | Organic Chemistry                | 1.25  |       | 3       |
| Chem 228                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 229                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 230                             | Organic Chemistry                | 1.25  |       | 3       |
| 5th Semester, 1998-2000<br>Chem 231  | Organic Chemistry                | 1.25  |       | 3       |
| Chem 232                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 233                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 234                             | Organic Chemistry                | 1.25  |       | 3       |
| 6th Semester, 2000-2002<br>Chem 235  | Organic Chemistry                | 1.25  |       | 3       |
| Chem 236                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 237                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 238                             | Organic Chemistry                | 1.25  |       | 3       |
| 7th Semester, 2002-2004<br>Chem 239  | Organic Chemistry                | 1.25  |       | 3       |
| Chem 240                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 241                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 242                             | Organic Chemistry                | 1.25  |       | 3       |
| 8th Semester, 2004-2006<br>Chem 243  | Organic Chemistry                | 1.25  |       | 3       |
| Chem 244                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 245                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 246                             | Organic Chemistry                | 1.25  |       | 3       |
| 9th Semester, 2006-2008<br>Chem 247  | Organic Chemistry                | 1.25  |       | 3       |
| Chem 248                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 249                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 250                             | Organic Chemistry                | 1.25  |       | 3       |
| 10th Semester, 2008-2010<br>Chem 251 | Organic Chemistry                | 1.25  |       | 3       |
| Chem 252                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 253                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 254                             | Organic Chemistry                | 1.25  |       | 3       |
| 11th Semester, 2010-2012<br>Chem 255 | Organic Chemistry                | 1.25  |       | 3       |
| Chem 256                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 257                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 258                             | Organic Chemistry                | 1.25  |       | 3       |
| 12th Semester, 2012-2014<br>Chem 259 | Organic Chemistry                | 1.25  |       | 3       |
| Chem 260                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 261                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 262                             | Organic Chemistry                | 1.25  |       | 3       |
| 13th Semester, 2014-2016<br>Chem 263 | Organic Chemistry                | 1.25  |       | 3       |
| Chem 264                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 265                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 266                             | Organic Chemistry                | 1.25  |       | 3       |
| 14th Semester, 2016-2018<br>Chem 267 | Organic Chemistry                | 1.25  |       | 3       |
| Chem 268                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 269                             | Organic Chemistry                | 1.25  |       | 3       |
| Chem 270                             | Organic Chemistry                | 1.25  |       | 3       |

Remarks:

1. The student has completed the requirements for the degree of Doctor of Philosophy in Chemistry.

2. The student has completed the requirements for the degree of Doctor of Philosophy in Chemistry.

3. The student has completed the requirements for the degree of Doctor of Philosophy in Chemistry.

4. The student has completed the requirements for the degree of Doctor of Philosophy in Chemistry.

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25. The student has completed the requirements for the degree of Doctor of Philosophy in Chemistry.

UNIVERSITY OF SAN CARLOS  
Cebu City, Philippines  
AUTHENTICATED COPY  
FROM THE ORIGINAL  
DOCUMENTS

ROMEO E. YAP  
University Registrar

APR 02 2018





# UNIVERSITY OF SAN CARLOS

## Office of the Registrar

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Tel. No. (63 32) 230-0100 local 112, 115, 138  
Fax No. (63 32) 230-0405

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Accrediting Association of  
Schools, Colleges and  
Universities (PAASCU)

SCHOOL CODE: 7978

### OFFICIAL TRANSCRIPT OF RECORDS

UNIVERSITY OF THE PHILIPPINES-DILMAN  
OFFICE OF THE UNIVERSITY REGISTRAR

OFFICIAL TRANSCRIPT OF RECORDS  
(Revised October 1996)

Name: **XANALYN, JACOB GLENN FLORA**  
Student No.: **30-42121**

| Course Number | DESCRIPTIVE TITLE OF THE COURSE | Final | Final<br>Average | Final<br>Grade |
|---------------|---------------------------------|-------|------------------|----------------|
| BSCE-1000     | Residence                       |       |                  |                |
| BSCE-1001     | Residence                       |       |                  |                |
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| BSCE-1003     | Residence                       |       |                  |                |
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| BSCE-1344     | Residence                       |       |                  |                |
| BSCE-1345     | Residence                       |       |                  |                |
| BSCE-1346     | Residence                       |       |                  |                |
| BSCE-1347     | Residence                       |       |                  |                |