

Transfer Guide for Associate of Arts Chemistry, 2009-2010

The following is presented as an articulation agreement between Joliet Junior College (JJC) and Governors State University (GSU) for the Chemistry degree program based on the 2009-10 catalogs of both schools. The student would receive an Associate of Arts (AA) degree from JJC and an American Chemical Society (ACS) approved Bachelors of Science (BS) degree in Chemistry from GSU.

I. **TRANSFERABLE GENERAL EDUCATION CORE CURRICULUM: (37-41 credits)**

(Refer to the AA/AS Degree Guidelines for a list of courses in Section I)

Communications (9 credits)

- ENG 101 - Rhetoric (3)
- ENG 102 - Rhetoric (3)
- SPCH 101 - Principles of Speech (3)

Humanities and Fine Arts (9 credits)

- One Humanities course (3)*
- One Fine Arts course (3)*
- One Humanities or Fine Arts Course (3)*

Mathematics (9 credits)

- MATH 170 - Calculus with Analytical Geometry I (5)
- MATH 171 - Calculus with Analytical Geometry II (4)

Physical and Life Sciences (10 credits)

Select one life science course and one physical science course. One course must have a lab.

- BIO 151 - General Biology I (5)
- CHEM 101 - General Chemistry I (5)

Social and Behavioral Sciences (9 credits)

- Select three courses in at least two different disciplines
- Social and Behavioral Science Course (9)*

II. **AREA OF CONCENTRATION/MAJOR FIELD (20 credits)**

- CHEM 102 - General Chemistry II (5)
- CHEM 105 - Quantitative Analysis (5)
- CHEM 209 - Organic Chemistry I (5)
- CHEM 210 - Organic Chemistry II (5)

REQUIRED A.S. DEGREE PROGRAM TOTAL: 64 credits (66 hours as written)

* Refer to the JJC AA/AS guidelines for a list of course choices For Sections I - II.
(over)

III. TO BE COMPLETE AT JJC OR GSU: (6 hours can be earned at JJC)

JJC CIS 122, 124, 130, 134 or 136 - Intro to Computer Information Systems (3) or
GSU CPSC 305, 320, or 330 - Computer Science Selective (3)

JJC MATH 220 - Diff. Equations & Orthogonal Functions (3) or
GSU MATH 455 - Differential Equations (3)

IV. TO BE COMPLETE AT GSU:

Required Courses: (35 hours)

CHEM 350	- Chemical Safety (1)
CHEM 351	- Chemistry and Ethics (1)
CHEM 366	- Physical Chemistry I: Lecture (3)
CHEM 367	- Physical Chemistry I: Laboratory (1)
CHEM 368	- Physical Chemistry II: Lecture (3)
CHEM 369	- Physical Chemistry II: Laboratory (1)
CHEM 426	- Instrumental Analysis (3)
CHEM 427	- Instrumental Analysis Laboratory (1)
CHEM 433	- Advanced Inorganic Chemistry (3)
CHEM 434	- Advanced Inorganic Chemistry Laboratory (1)
CHEM 452	- Intro to Chemistry Software and Molecular Modeling (1)
CHEM 455	- Chemical Literature (1)
CHEM 544	- Biochemistry: Lecture I (3)
CHEM 545	- Biochemistry: Laboratory (1)
PHYS 352	- Intermediate Physics I (3)
PHYS 353	- Intermediate Physics I Laboratory (1)
PHYS 362	- Intermediate Physics II (3)
PHYS 363	- Intermediate Physics II Laboratory (1)
STAT 520	- Statistical Methods (3)

Advanced Laboratory Selective (2)

Select one of the following laboratory courses:

CHEM 450	- Organic Synthesis & Structural Methods (2)
CHEM 485	- Undergraduate Research Experience (2)

Advanced Courses (6 hours)

CHEM 490	- Chemistry Research (1-3)
CHEM 505	- Environmental Chemistry Lecture (3)
CHEM 506	- Environmental Chemistry Laboratory (1)
CHEM 535	- Industrial Chemistry (3)
CHEM 546	- Biochemistry: Lecture II (3)
CHEM 550	- Polymer Chemistry (3)

Other science courses as approved by GSU faculty advisor.

Electives (5 hours)

Required for the BS in Chemistry: 120

For Additional Information:
Governors State University
www.govst.edu/cas
Office of Admission
(708) 534-4490

Joliet Junior College
www.jjc.edu
Transfer Center
(815) 280-2449