All hand-outs are posted on the faculty website at www.nwic.edu/faculty (follow the Assessment link)

Before completing this form, please refer to the *Instructions for Completing the Course Outcomes Form.* Please submit this form electronically to amkarlberg@nwic.edu.

Last date this form was updated or edited	September 2005
Course Number (e.g., ENGL 101)	CHEM 111
Course Name (e.g., English Composition I)	Inorganic Chemistry
List all instructor(s) who participated in creating and approved these course outcomes (please consult with at least one other person)	Rochelle Troyano, Adib Jamshedi
List the main textbooks, readings or other resources used in this course (including title, year and publisher)	

A. NWIC outcomes: From the *List of NWIC Outcomes*, select the <u>most</u> important outcomes you <u>assess</u> in this course (at least <u>one</u> NWIC outcome must be chosen).

NWIC outcome # (e.g., "Written communication: 2a. write standard English")	Instructional Activities: How will students master this outcome? (e.g., solving problems, group activity)	Assessment/Evaluation Strategies: How will you measure this outcome? (e.g., student presentations, essays)
Written Communication: 2a. Write standard English.	Write answers to essay questions	Essays clearly answer questions
Quantitative Skills: 5a. Propose solutions to and solve realworld problems by applying the correct numerical data.	Correct mathematical operation Unit cancellation techniques are used	The student selects the correct mathematical operation that applies to the statements
	Concept of significant figures is understood	

B. Course outcomes: In order of priority, list the <u>most</u> important other learning outcomes for this course that you <u>assess</u> (a maximum of 8).

Other course outcomes: Complete the sentence – As a result of this course, students will be able to	Instructional Activities: How will students master this outcome? (e.g., solving problems, group activity)	Assessment / Evaluation Strategies: How will you measure this outcome? (e.g., student presentations, essays)
Students will be able to describe how periodic properties and trends affect electronic configurations and intermolecular forces.	 presentation of lecture based on text use of Internet-based learning activities visual viewing and written description of periodic table 	 Exams/quizzes employing combination of multiple choice, true/false/short answer questions Weekly reflection papers to enhance recall
2. Students will be able to state how intermolecular forces relate to all phases of matter.	 presentation of lecture based on text use of Internet-based learning activities 	 Exams/quizzes employing combination of multiple choice, true/false/short answer questions Weekly reflection papers to enhance recall
3. Students will be able to do complex calculations based on stoichiometry and the MOLE concept.	 presentation of lecture based on text use of Internet-based learning activities laboratory workshops on chemical calculations with strong emphasis on unit cancellation 	test booklets of chemical calculations
4. Students will be able to describe chemical bonding and how this produces chemical formula relationship and reactions.	 presentation of lecture based on text use of Internet-based learning activities 	 Exams/quizzes employing combination of multiple choice, true/false/short answer questions Weekly reflection papers to enhance recall

5. Students will be introduced to various lab techniques	1. lab presentations	1. Lab work and written reports

C. Please list the NWIC outcomes and course outcomes from above on your syllabus.