

Worksheet for M.A. in chemistry, industry students not doing research

The Department offers a broadly based non-research M.A. degree. This particular worksheet pertains to part-time students (not doing research) who are usually from industry and interested in a coursework-based M.A. degree. This course of study requires a total of 30 hours of graduate credit. See the departmental website for more description on the required courses. The core curriculum involves 12 hours consisting of two courses from each of two primary focus areas of advanced chemistry. The remaining hours can come from other graduate chemistry courses or from advanced courses in other disciplines.

Core curriculum (12 hrs)

A core curriculum (12 hrs total) consisting of 2 courses from each of the 2 primary focus areas (6 hrs from each area)

1. Synthesis & Materials Chemistry

CHEM 5160 Advanced Synthetic Chemistry (3)
CHEM 5400 Organic Spectroscopy (3)
CHEM 5440 Bioorganic Chemistry (3)
CHEM 5450 Advanced Organic Chemistry (3)
CHEM 5460 Synthetic Organic Chemistry (3)
CHEM 5470 Medicinal Chemistry (3)
CHEM 5480 Heterocyclic Chemistry (3)
CHEM 5500 Inorganic Chemistry (3)
CHEM 5550 Organometallic Chemistry (3)
CHEM 5560 Solid State Chemistry (3)
CHEM 5590 Special Topics - Inorganic (3)
CHEM 5610 Biochemistry 1 (3)
CHEM 5615 Biochemistry 2 (3)
CHEM 5800 Nanomaterials (3)
CHEM 5850 Polymer Chemistry (3)

2. Analytical & Physical Methods.

CHEM 5150 Statistical Methods (3)
CHEM 5170 Advances in Analysis and Modeling of Chemical Systems (3)
CHEM 5200 Analytical Chemistry 2 (3)
CHEM 5230 Mass Spectrometry (3)
CHEM 5250 Bioanalytical Methods (3)
CHEM 5260 Analytical Separations (3)
CHEM 5270 Electroanalytical Chemistry (3)
CHEM 5280 Chemical Sensors (3)
CHEM 5290 Special Topics - Analytical (3)
CHEM 5300 Math Techniques
CHEM 5330 Advanced Physical Chemistry (3)
CHEM 5340 Advanced Thermodynamics (3)
CHEM 5350 Colloids and Interfacial Chem (3)
CHEM 5370 Computational Chemistry (3)
CHEM 5390 Special Topics - Physical (3)
CHEM 5450 Advanced Organic Chemistry (3)
CHEM 5570 Group Theory and Spectroscopy (3)
CHEM 5620 Biophysical Chemistry (3)
CHEM 5630 Chemical Biology and Biotechnology (3)
CHEM 5700 Environmental Chemistry (3)
CHEM 5800 Nanomaterials (3)

List 2 of the courses (course #) you have taken from in the synthesis/materials core:

1) _____ 2) _____ (6 hrs)

List 2 of the courses (course #) you have taken from in the analytical/physical methods core:

1) _____ 2) _____ (6 hrs)

Chemistry Electives: must be 12 hrs or more. List the other chemistry courses you have taken along with the total # of hrs. The remaining 4 courses should come from either area listed above and be 5000-level or higher. In special cases, with the approval of Graduate Program Coordinator, a course can be taken from a different discipline, such as math or engineering. In most cases, this is limited to 1 course.

1) _____ 2) _____ 3) _____ 4) _____

of elective hrs _____ (Should be at least 12 hrs)

Research Topics: A research topics course must be taken during the summer for 3 credit hours. Contact the Graduate Program Coordinator for more details.

CHEM 5970 Research Topics (3 hrs) _____ (can't be more than 3 hrs)

Graduate Reading Course: A graduate reading course must be taken during the summer for 3 credit hours. Contact the Graduate Program Coordinator for more details.

CHEM 5980 Graduate Reading Course (3 hrs) _____ (can't be more than 3 hrs)

Total # of hrs _____ **(should be 30 or more)**