Interdisciplinary Studies with an Emphasis in Professional Chemistry

Contact Information: Dr. David Khan, Professor

dkhan@wtamu.edu

806-651-2547

What are your education and career goals?

This program is well suited for students who wish to pursue a career in academic or professional career in chemistry. The required courses are intended to provide students with adequate preparation in both chemistry as well as other disciplines that will help them be successful.

How will an Interdisciplinary Studies degree help you meet these goals?

The explosive growth of the undergraduate biochemistry degree in our department is ample evidence that an interdisciplinary degree in chemistry is very popular with both students and employers right now. Our increasingly diversified workforce demands that students not only receive academic training in a specific field, but that they can demonstrate their success in other academic areas.

What three disciplines will you study?

The following is an outline of courses that students choosing this program can choose from. Each student will indicate which courses they are choosing to apply.

Required Chemistry Proficiency Courses (12 hours)

- Advanced Inorganic (CHEM 6320) -OR- Inorganic Chemistry (CHEM 5431)
- Advanced Organic (CHEM 6340)
- Introduction to Quantum Mechanics (CHEM 6350) -OR- Physical Chemistry I (CHEM 5521) -OR- Physical Chemistry II (CHEM 5522)
- Advanced Analytical Chemistry (CHEM 6314)

Required Biochemistry/Experiential courses (12 hours/3 hours must be CHEM 6097)

- Enzymology (CHEM 6341)
- Advanced Metabolism (CHEM 6342)
- Graduate Research (CHEM 6097)
- Internship (CHEM 6098)
- Seminar (CHEM 6110)

Professional Skills or "Plus" Courses (Students can choose from 12 hours)

- May be taken from a field other than chemistry that helps the student prepare for their career and should be taken as a concentration of courses. Examples are below
- Marketing
 - o MKT 6340 Seminar in Marketing
 - o MKT 6350 Contemporary Issues in Marketing
 - MKT 6352 Seminar in Evolutionary Marketing
 - MKT 6354 Research Methods for Marketing Intelligence

Management

- MGT 6300 Business Management
- o MGT 6330 Seminar in International Management
- o MGT 6332 Seminar in Organization Theory
- o MGT 6334 Seminar in Organizational Behavior
- MGT 6336 Advanced Human Resources Management

Economics

- o ECON 6300 Topics in Contemporary Economic Theory
- o ECON 6312 Seminar in Money and Banking
- o ECON 6332 Problems in Government Finance and Fiscal Policy
- o ECON 6341 Seminar in International Economics and Economic Development
- o ECON 6352 Environmental Policy Issues

Communications

- o COMM 6306 The Art of Storytelling
- o COMM 6310 Instructional Training and Development in Communication
- COMM 6330 Mass Communication Seminar
- o COMM 6331 Seminar in Organizational Communication
- o COMM 6340 Seminar in Public Communication

• Environmental Science

- ENVR 6304 Ecological Risk Assessment
- o ENVR 6305 Geographic Information Systems
- ENVR 6320 Environmental Regulations
- o ENVR 6344 Agricultural Waste Management