

**New Course Request****Academic Organization and Curriculum Handbook**

College BIO

Course BIOCHEM - BIOCHEMISTRY  
Bulletin  
ListingCourse Prefix  
Course Number 905 ☐ Generic course or decimal  
subdivision?

Full Course Title Advanced Biochemistry: Bio-Macromolecular NMR Spectroscopy

Transcript Title Biomolecular NMR

Level ☐ Undergraduate ☒ Graduate  
☐ Professional

Credit Hours 3

Proposed Effective Year 09

Proposed Effective Term Spring Quarter

**Course Bulletin**

Course Description Application of NMR spectroscopy to the study of biological macromolecules. Heteronuclear NMR, product operators, multidimensional spectra, proteins, nucleic acids, structure determination, dynamics, ligand complexes.

Terms Offered

Quarter(s)

- ☐ Autumn  
☐ Winter  
☒ Spring  
☐ Summer  
☐ Summer 1  
☐ Summer 2

Offering Pattern ☐ This year ☒ Every other year

Distribution of Class Time 3 1hr cl

Omit distribution of class time from printing? ☒

Prerequisites

Grad status in Biochemistry, Biophysics or Chemistry, or instructor permission

☒ Electronic enforcement of prerequisites?

Exclusion or Limiting  
Clause

Repeatable? ☐

Cross Listed? ☐

Course part of a  
sequence? ☐

Grade Option ☒ Letter ☐ S/U ☐ Progress

☐ GEC Course

General Course  
Information Statement

☐ Off Campus/Field Experience?

☐ EM Credit?

☐ Admission Condition Course?

☐ Offered in Distance Learning Format?

☐ Service Learning?

### General Information

**Subject (CIP) Code** 260202

**Subsidy Level** D

If you have questions, please contact Jed Dickhaut @ [dickhaut.1@osu.edu](mailto:dickhaut.1@osu.edu).

Expected Section Size 10

Proposed Number of Sections Per Year 1

☐ Course time less than 1 full term or Workshop

☐ Off-campus offering?

☐ Required on Major(s)

- ☐ Required on Minor(s)
- ☐ Elective within Major(s)
- ☐ Elective within Minor(s)
- ☐ Choice of Major(s)
- ☐ Choice of Minor(s)
- ☒ A General Elective

State the need and purpose of the course. Indicate how the course relates to the primary goals of the academic unit/school/college/university.

This course meets a need for formal instruction in the application of NMR spectroscopy to the study of biological macromolecules. Itfills an existing gap in instruction on campus and will be of value to all students interested in biomolecular structure and fuction. The course will benefit students in biological, physical, biomedical and pharmaceutical sciences.

Indicate the nature of the program adjustments, new funding, and/or withdrawals that make possible the implementation of this new course. Evidence must be given of whether the budget support will come from reallocation of existing resources or from new program funds.

The content of the course was presented in Summer 2007 as a special topics course in Advanced Biochemistry (Biochem 900). Assigning a specific course number and syllabus will ensure that the availability of the course is recognized more widely across campus. Thus, no additional resources will be required to offer the course.

Is approval of this request contingent upon the approval of other course or curricular requests? ☐ Yes ☒ No

Please complete and attach the form(s) on the following page before completing the package.

**Course Supplement Form**

**Course Contact Information**

Faculty Name Mark P. Foster

Faculty Email foster.281@osu.edu

Contact Name Mark P. Foster

Contact Dept Biochemistry

Contact Email foster.281@osu.edu