

New Program

Professional Science in Cellular and Molecular Biology Emphasis

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This track requires a total of 32 credit hours, of which at least half must be at the 5000-level or above. Students will take 21 credit hours in Biology, 9 hours in business courses, and 2 credit hours of internship/practicum. Professional Science students: 1) must take 2 seminars (4 credit hours total) of [BIOL 6889](#), 2) are limited to a maximum of 2 credit hours of Topics in Cellular and Molecular Biology ([BIOL 5069](#)) and 3) cannot count any hours of Graduate Research ([BIOL 6905](#)) as part of the 32 credit hour total.

Required Courses		
BIOL 6889	Graduate Seminar (must be taken twice)	4
Choose three of the following:		9-10
BIOL 6602	Advanced Molecular Biology	
BIOL 6612	Advanced Molecular Genetics Of Bacteria	
BIOL 6615	Advanced Biotechnology Laboratory II	
BIOL 6622	Advanced Cellular Basis of Disease	
BIOL 6632	Advanced Nucleic Acid Structure And Function	
BIOL 6642	Advanced Plant Biology And Biotechnology	
Elective Courses in Biology		7-8
BIOL 4713	Techniques In Biochemistry	
BIOL 4842	Immunobiology	
BIOL 5069	Topics In Cellular And Molecular Biology ¹	
BIOL 6442	Advanced Developmental Biology	
BIOL 6550	Advanced Bacterial Pathogenesis	
BIOL 6602	Advanced Molecular Biology	
BIOL 6612	Advanced Molecular Genetics Of Bacteria	
BIOL 6622	Advanced Cellular Basis of Disease	
BIOL 6632	Advanced Nucleic Acid Structure And Function	
BIOL 6642	Advanced Plant Biology And Biotechnology	
BIOL 6652	Advanced Virology	
BIOL 6920	Topics In Biology (when relevant)	
Required Internship or Practicum		2
BIOL 5798	Practicum in Science in Business	
or BIOL 5799	Internship in Sciences in Business	

Professional Science Business Electives		9
<u>MGMT 3623</u>	Industrial And Organizational Psychology	
<u>BUS AD 5000</u>	Economics For Managers	
<u>BUS AD 5100</u>	Managerial Communication	
<u>MGMT 5600</u>	Organizational Behavior And Administrative Processes	
<u>MKTG 5700</u>	Contemporary Marketing Concepts	
<u>BUS AD 5900</u>	Law, Ethics And Business	

Maximum of 2 credit hours.

Sign-offs from other departments affected by this proposal

Department	Contact Person	Phone #	Objections
S002900	Tom Eyssell	6273	No

Rationale

This is a new type of master's degree that blends traditional graduate training in the sciences with graduate training in business, with an emphasis on professional skills such as written and oral communications. Such programs prepare students for a career working in companies at the interface between the science and business operations. The Professional Science emphasis area utilizes courses from three departments in the College of Business. Dr. Tom Eyssell, as Associate Dean and Director of Advanced Studies, has been involved in the development of this program and has agreed to sign off on behalf of the College of Business.