



**ROCHESTER INSTITUTE OF TECHNOLOGY
COURSE OUTLINE FORM**

COLLEGE OF SCIENCE

Chester F. Carlson Center for Imaging Science

NEW COURSE: COS-IMGS-503-Imaging Science Senior Project II

1.0 Course Approvals

Required course approvals:	Approval Requested Date:	Approval Granted Date:
Academic Unit Curriculum Committee		
College Curriculum Committee		

Optional designations:	Is designation desired?	*Approval request date:	**Approval granted date:
General Education:	No		
Writing Intensive:	No		
Honors	No		

2.0 Course information:

Course title:	Imaging Science Senior Project II
Credit hours:	3
Prerequisite(s):	Permission of instructor
Co-requisite(s):	None
Course proposed by:	María Helguera
Effective date:	Fall 2013

	Contact hours	Maximum students/section
Classroom		
Lab		
Studio		
Other (specify)	Determined by research advisor	

2.1 Course Conversion Designation (Please check which applies to this course)

x	Semester Equivalent (SE) Please indicate which quarter course it is equivalent to: 10 51 502
	Semester Replacement (SR) Please indicate the quarter course(s) this course is replacing:
	New

2.2 Semester(s) offered (check)

Fall	x	Spring	x	Summer	x	Other
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All courses must be offered at least once every 2 years. If course will be offered on a bi-annual basis, please indicate here:

2.3 Student Requirements

Students required to take this course: (by program and year, as appropriate) Imaging Science students with senior status
Students who might elect to take the course:

3.0 Goals of the course (including rationale for the course, when appropriate):

3.1 To do research in the field of imaging science and/or its applications
3.2 To present the results of the research in a public forum.

4.0 Course description (as it will appear in the RIT Catalog, including pre- and co-requisites, and quarters offered). Please use the following format:

COS-IMGS-503	Imaging Science Senior Project I
Students perform the independent research project defined in the proposal developed in COS-IMGS-501. The project is supervised by a faculty member in imaging science. The student presents the results of the project to a public meeting. (Permission of instructor)	
Research 3, Credit 3 (F,S,Su)	

5.0 Possible resources (texts, references, computer packages, etc.)

5.1 None

6.0 Topics (outline):

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7.0 Intended course learning outcomes and associated assessment methods of those outcomes

Course Learning Outcome	Assessment 1	Assessment 2
Conduct independent research project	Weekly meetings with advisor	Mid-project oral presentation and written document

8.0 Program outcomes and/or goals supported by this course

Under the supervision of a faculty or research staff member, design and conduct experiments, analyze and interpret data, and communicate the significance of results in both written and oral formats.
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9.0

	General Education Learning Outcome Supported by the Course	Assessment Method
<i>Communication</i>		
	Express themselves effectively in common college-level written forms using standard American English	
	Revise and improve written and visual content	
	Express themselves effectively in presentations, either in spoken standard American English or sign language (American Sign Language or English-based Signing)	
	Comprehend information accessed through reading and discussion	
<i>Intellectual Inquiry</i>		
	Review, assess, and draw conclusions about hypotheses and theories	
	Analyze arguments, in relation to their premises, assumptions, contexts, and conclusions	
	Construct logical and reasonable arguments that include anticipation of counterarguments	
	Use relevant evidence gathered through accepted scholarly methods and properly acknowledge sources of information	
<i>Ethical, Social and Global Awareness</i>		
	Analyze similarities and differences in human experiences and consequent perspectives	
	Examine connections among the world's populations	
	Identify contemporary ethical questions and relevant stakeholder positions	
<i>Scientific, Mathematical and Technological Literacy</i>		
	Explain basic principles and concepts of one of the natural sciences	
	Apply methods of scientific inquiry and problem solving to contemporary issues	
	Comprehend and evaluate mathematical and statistical information	
	Perform college-level mathematical operations on quantitative data	
	Describe the potential and the limitations of technology	
	Use appropriate technology to achieve desired outcomes	
<i>Creativity, Innovation and Artistic Literacy</i>		
	Demonstrate creative/innovative approaches to course-based assignments or projects	
	Interpret and evaluate artistic expression considering the cultural context in which it was created	

10.0 Other relevant information (such as special classroom, studio, or lab needs, special scheduling, media requirements, etc.)

Needs vary according to research project