



# OFFICE OF INSTRUCTION

## Curriculum/Tenure Review/Faculty Evaluation & Catalog

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## Catalog Update for 2018-19 College Catalog

Last Updated: July 12, 2018

### Programs

The following programs shall be considered included in the 2018-19 College Catalog, with the effective dates noted below.

Department	Program	Effective Date
Chemistry	Certificate of Achievement in Chemistry - NEW	Fall 2018
Cinema	Certificate of Achievement in Pre-Production/Producing - NEW	Fall 2018

### CHEMISTRY

#### Chemistry Certificate of Achievement

Chemistry is the investigation of matter. Grappling with the difficult problems students will face during their lifetimes such as the treatment of disease, assessment of environmental pollutant risk, the challenge of feeding a growing world population, understanding the processes that affect the Earth's climate, and the continuous improvement of technology all requires an integrated approach to problem solving and an understanding of chemistry. Students obtaining a Certificate of Achievement in chemistry will develop a view of the world around them that is shaped by their understanding of chemical principles, physics, and the language of mathematics. During experiences in a laboratory setting, students will practice the scientific method to explore chemical phenomena, solve problems in a strategic fashion, and formulate and communicate an understanding of matter from a chemist's perspective. Students obtaining a Certificate of Achievement in chemistry will be prepared to transfer to a Bachelor of Science in chemistry program at a four-year college and take upper division chemistry coursework in thermodynamics, quantum mechanics, as well as organic, inorganic, and nuclear chemistry, enter the chemistry workforce, or pursue opportunities where chemistry plays a role. Future careers for students obtaining a Certificate of Achievement in chemistry, after further education, include:

- High school or middle school teacher
- Physician
- Patent attorney
- Chemical Engineer
- Criminologist

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- Museum Curator
- Environmental Engineer

### Learning Outcomes

Upon completion of this program, students will be able to:

- Assess scientific data and use those data to evaluate the quality of conclusions.
- Perform multi-step organic syntheses, planning through implementation and structural verification, with the aid of gas chromatography/mass spectrometry and infrared and nuclear magnetic resonance spectroscopy.
- Identify and quantify organic chemical compounds after obtaining and purifying them from their natural plant sources.
- Use multiple pieces of scientific laboratory instrumentation to analyze environmental samples and use this data to evaluate the risks of environmental exposure.
- Use current technology to assess, organize, and apply relevant chemical information.
- Apply mathematical representations and use the language of chemistry to communicate an understanding of chemistry in written and oral form.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

### Courses Required for the Certificate of Achievement in Chemistry

#### Required courses:

CHEM 101A - General College Chemistry .....	6.00
CHEM 101B - General College Chemistry .....	5.00
CHEM 212A - Organic Chemistry .....	6.00
CHEM 212B - Organic Chemistry .....	6.00
MATH 110A - Calculus I .....	5.00
MATH 110B - Calculus II .....	5.00
MATH 110C - Calculus III .....	5.00
MATH 130 - Linear Algebra and Differential Equations.....	5.00
PHYC 4A - Classical Mechanics for Scientists and Engineers.....	3.00
PHYC 4AL - Mechanics Laboratory for Scientists and Engineers.....	1.00
PHYC 4B - Electromagnetism for Scientists and Engineers.....	3.00
PHYC 4BL - Electromagnetism Laboratory for Scientists and Engineers .....	1.00

Students may substitute MATH 120 + 125 for MATH 130.

#### Elective Courses (choose one):

CHEM 85 - Seminar in Chemistry.....	1.00
BTEC 5 - Briefings in Biotechnology.....	1.00
<b>Total.....</b>	<b>52.00</b>

## CINEMA

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### Pre-Production/Producing Certificate of Achievement

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The Pre-Production/Producing certificate prepares students in the planning and the business of the production of motion pictures including inter-disciplinary instruction in Cinema production, pre-production and basic business offerings. The curriculum examines the narrative and provides real world skills such as evaluating cost, budgeting and marketing in order to complete a film or commercial project. Students who complete this certificate are prepared for entry level positions in a producer's office in positions such as Assistant Production Office Coordinator, Travel Coordinator, or Transportation Dispatcher.

## Learning Outcomes

Upon completion of this program, students will be able to:

- Manage technical aspects of motion picture and video production.
- Analyze data to make responsible business decisions relevant to motion picture and video production.
- Use motion picture and video terms and concepts when communicating with client and crew.
- Propose solutions to ethical and social conflicts in a multi-cultural, team-oriented, rapidly changing environment.
- Act professionally and employ workforce protocol in collaboration, communication, and behavior in a film production environment

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

### Courses Required for the Certificate of Achievement in Pre-Production/Producing

#### Required courses:

CINE 24 - Basic Film Production .....	4.00
CINE 25 - Narrative Filmmaking .....	3.00
CINE 30 - Production Planning .....	3.00
CINE 54 - Cinematography & Lighting.....	3.00
CINE 170 - Film/Video Work Experience.....	2.00

#### Choose one of the following course electives:

CINE 126 - Documentary Filmmaking .....	3.00
CINE 131 - Directing Motion Pictures .....	3.00

#### Choose one of the following business courses:

GNBS 119 - Introduction to Business .....	3.00
MRKT 122 - Professional Selling .....	3.00
SMBS 135 - Ownership and Operation of a Small Business.....	3.00
<b>Total.....</b>	<b>21.0</b>