

Citrus College

# Citrus College

2016-2017  
Catalog



## Table of Contents

<b>Addendum</b>	<b>Page</b>
Errors	3-4
<b>New Associate Degrees for Transfer (AD-Ts)</b>	<b>Page</b>
Biology	5-6
<b>Modified Associate of Arts (A.A.) and Science (A.S.) Degrees</b>	<b>Page</b>
Design and Engineering Drawing Technology (formerly Design and Drafting Technology), A.S.	7-8
<b>Modified Certificates</b>	<b>Page</b>
Biomanufacturing	9-10
<b>New Courses</b>	<b>Page</b>
MATH 140	11
<b>Modified Courses</b>	<b>Page</b>
ART 240	11
REAL 218	11-12
REAL 220	12
REAL 224	12

## 2016/17 Catalog Errors

Page	Section	Correction
9	Mission Objectives	8 <sup>th</sup> and 9 <sup>th</sup> bullet points were combined together. 9 <sup>th</sup> bullet point begins "award occupational certificates..."
11	Citrus College Directory	The correct title for "Institutional Research" is "Institutional Research, Planning and Effectiveness."
34	Progress Indicators for Noncredit Courses	See below.

*The following text was left out of the catalog, and should have been included immediately following the "Progress Indicators for Noncredit Courses" section on page 34.*

### Non-Evaluative Grades

Non-evaluative grades are not assigned a grade point value and therefore are not used in calculating GPA. Credits are not issued when the following non-evaluative grades are assigned.

#### **Incomplete: I**

Incomplete academic work for unforeseeable, emergency and justifiable reasons may result in the I symbol being entered in a student's record at the end of the term. The condition for removal of the I, and the grade to be assigned at the time of its removal, is stated by the instructor in a written record. An I will not be used in calculating units or grade points.

A copy of the written record is given to the student and the original is filed in the Admissions and Records Office. A final grade is assigned when the required work has been completed and evaluated, or when the time limit for completing the work has passed.

An incomplete grade may be made up within one year following the end of the term in which it was assigned.

#### **Withdrawal: W**

W denotes withdrawal from a class or classes when a student withdraws after the no-notation deadline, but before the drop with a W deadline. No notation is made

on the academic record of a student that withdraws before the no-notation deadline. Please consult the Admissions and Records Office for deadline dates.

Although W is not used in calculating grade point average, excessive withdrawals are used as factors in calculating academic standing and may result in a student being placed on progress probation or dismissal. Withdrawals count towards repetition limits for courses.

Withdrawal from a class or classes due to extenuating circumstances—verified cases of accident, illness or other circumstances beyond the control of the student—may be authorized after the withdrawal deadline and before the issuance of a grade, upon petition by the student.

### **Military Withdrawal: MW**

MW is assigned to active or reserve members of the military who receive orders that compel a withdrawal from courses. Upon verification of such orders, a MW will be assigned at any time, during which no notation is made for withdrawals. A Military Withdrawal shall not be counted in progress probation and dismissal calculations, or in course repeatability limits.

### **In Progress: IP**

IP is used only in those courses that extend beyond the normal end of an academic term. It indicates that work is “in progress,” and that a grade will be assigned upon completion of the work. When the appropriate evaluative grade and unit credit is assigned, it will appear on the student’s record for the term in which the required work of the course is completed.

### **Report Delayed: RD**

RD is assigned by the registrar when there is a delay in reporting the grade of a student, due to circumstances beyond the control of the student. It is a temporary notation and is replaced by a permanent symbol as soon as possible.

## **Evaluating Academic Progress**

### **President’s List**

To be eligible for the President’s List, a student must have a 3.8 GPA in at least 6 units completed in the semester they are being recognized, and a minimum of 24 units completed at Citrus College. Non-degree applicable courses are not included.

**Dean's List**

Dean's List students must have a 3.5 GPA in at least 6 units completed in the semester they are being recognized, and a minimum of 24 units completed at Citrus College. Non-degree applicable courses are not included.

## New Associate Degrees for Transfer (AD-Ts)

### Biology

#### AS-T Degree

Biology is a natural science that focuses on living organisms, including their structure, function, growth and development, and evolution and adaptation to the environment. The Associate in Science in Biology for Transfer Degree can be a stand-alone degree or serve as preparation for a curriculum in a four-year institution, leading to a baccalaureate degree in areas such as microbiology, organismal biology, cell and molecular biology.

Students who complete this degree will be guaranteed admission with junior status to the California State University system, and will be given priority admission to our local CSU campus.

Students receiving this transfer degree must meet the following requirements:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in the major or area of emphasis, as determined by the community college district.

(2) Obtain a minimum grade point average of 2.0.

ADTs also require that students earn a C or better in all of the courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

#### Required courses:

BIOL 124	Principles of Biology I	5
BIOL 125	Principles of Biology II	5
CHEM 111	General Chemistry	5
CHEM 112	General Chemistry	5
PHYS 201	Physics A: Mechanics	5
PHYS 202	Physics B: Thermodynamics and Electromagnetism	5
MATH 190	Calculus with Analytic Geometry I	4

**Total Units 34**

### **A.S.-Transfer Degree Level Student Learning Outcomes**

Students completing the Biology A.S.-Transfer Degree will:

1. Demonstrate an understanding of biological concepts.
2. Acquire scientific information from multiple sources including textbooks, the Internet, personal communication with professionals in the field, and educational computer software.
3. Estimate and/or calculate the characteristics of biological systems and demonstrate an understanding of these calculations in order to better understand the natural processes that produce these characteristics.
4. Formulate scientific hypotheses in order to distinguish between scientific and non-scientific questions and methods.
5. Develop an understanding of relevant biological processes as well as processes from related sciences (e.g. physics, geology, chemistry) and apply these processes to predict the properties of biological systems.
6. Examine how human activity has contributed to positive and negative changes in the environment to better understand and discuss past, current, and future environmental issues.

## Modified Associate of Arts (A.A.) and Science (A.S.) Degrees

### Design and Engineering Drawing Technology

*(formerly Design and Drafting Technology)*

#### A.S. Degree

The Design and Engineering Drawing Technology major concentrates on visualizing architecture, engineering, drafting, entertainment, animation and Computer Generated Imagery (CGI). It is a creative, technical practice and discipline with a balance of a design and technical courses providing students with a diverse foundation of knowledge in the fields above. Emphasis is on proper and efficient methods of engineering drawing, digital production, sketching, story boarding, 3D digital models, animations and multifaceted presentations.

This degree prepares the student for entry level opportunities as a CAD person / design person or animation modeler.

This degree requires meeting the Citrus College General Education and proficiency requirements combined with successful completion (grades of "C" and above) of the following major requirements:

#### Required courses:

Course	Title	Units
ARCH 100	Introduction to Architecture and Environmental Design Foundations	3
-----		
ARCH 102	Visual Communication	2.5
	or	
DRAF 102	Visual Communication	2.5
-----		
ARCH 200	Portfolio Preparation	3
DRAF 160	Foundation Digital Design Tools - Intermediate Computer Aided Design (CAD)	3
DRAF 161	Advanced Computer Aided Design (CAD and Design Tools )	3
DRAF 190	Advanced Digital Design Tools	3
DRAF 290	Introduction to Maya Practices.	3

**Total Units: 20.5**

## A.S. Degree Level Student Learning Outcomes

Students completing the Design and Engineering Drawing A.S. Degree will:

1. Describe effective engineering drawing, Computer Generated Imagery (CGI) and visualization techniques including graphic communication of design and technical drawings, orientation of design and technical drawings, and the decision making process for design and technical drawings.
2. Demonstrate the ability to use technology to prepare engineering drawing, architectural, Computer Generated Imagery (CGI), Computer Aided Drawings (CAD), and multimedia presentations. Estimate time, material, labor and equipment required for this expertise.
3. Demonstrate planning techniques and administration of engineering drawing, architectural, Computer Generated Imagery (CGI) and document control for design and technical working drawings.

## Modified Certificates

### Biomanufacturing

#### Certificate of Achievement

Biomanufacturing is a diverse industry merging large-scale manufacturing practices with biotechnology applications. Companies in this growing sector manufacture a variety of products, such as therapeutics, clinical diagnostic tests, food and beverages, dietary supplements, and biofuels. The Biomanufacturing Certificate of Achievement at Citrus College prepares students for in-demand entry-level positions in the local biomanufacturing industry. Upon completion of the program, students will be prepared to seek employment as biological technicians, manufacturing production technicians, quality control technicians, and environmental monitoring technicians. Students gain conceptual knowledge of biotechnology and its regulation, as well as extensive hands-on laboratory experience with industry-standard tools and equipment. The program also emphasizes workforce readiness, including resume writing and job interview skills.

#### Required courses:

Course	Title	Units
BIOT 107	Biotechnology: Transforming Society Through Biology	3
	or	
BIOT 108	Intro to Biotechnology: Real World Biology Applications	4
-----		
BIOT 110	Biotechnology I: Basic Lab Skills and Documentation	5
BIOT 125	Quality and Regulatory Practices in Biotechnology	3
BIOT 150	Biotechnology II: Biomanufacturing and Quality Principles	4
-----		
MATH 142	Beginning and Intermediate Algebra II	5
	or	
MATH 144	Technical Mathematics	5
	or	
MATH 150	Intermediate Algebra	5

*Some sections of MATH 142 are fast track (second 8 weeks of the semester), and require that students also register for a fast track section of MATH 032 (first 8 weeks of the semester).*

**Total Units: 20-21**

## Certificate of Achievement Level Student Learning Outcomes

Students completing the Biomanufacturing Certificate of Achievement will:

1. Calibrate and safely operate standard equipment and instrumentation utilized in the biomanufacturing industry.
2. Document laboratory activities, experimental data, and manufacturing procedures following Good Documentation Practices (GDP) used in the biomanufacturing industry.
3. Explain the significance of and demonstrate proficiency in aseptic technique for maintaining product integrity in a biomanufacturing setting.
4. Prepare a variety of chemical solutions necessary for the biomanufacturing process and quality testing.
5. Prepare for a job interview and generate a resume appropriate for entry-level positions in the biomanufacturing industry.
6. Describe the principles of Good Manufacturing Practices (cGMP) and perform tasks in accordance with these standards and established safety procedures.

## New Courses

### MATH 140

#### Pre-Statistics

#### 5 Units

#### Grade or Pass/No Pass

#### **Prerequisite(s): MATH 029.**

This course surveys a variety of mathematical topics needed to prepare students for college-level statistics. Pre-Statistics is designed for students in majors such as those in liberal arts, humanities, and social sciences. It should not be taken by students majoring in science, technology, engineering, math, business, nursing, or any other major requiring a specific math course other than statistics. Topics include: performing operations on and evaluation of algebraic expressions, designing observational studies and experiments, graphical and tabular display of data, summarizing data, computing probabilities, describing associations of two variables graphically, graphing equations of lines and linear models, solving linear equations and inequalities, finding linear models, and using exponential models to make predictions.

## Modified Courses (modifications in red)

### ART 240

#### Advanced Ceramics I

#### 3 Units

#### Grade Only

#### **Prerequisite(s): ART 141.**

An advanced course in pottery with an emphasis on larger forms and development of a distinctive **artistic** style. Also included is glaze technology and basic kiln operation. 36 lecture hours. 72 lab hours. CSU UC

### REAL 218 (**reactivated**)

#### Real Estate Appraisal

#### 3 Units

#### Grade Only

#### **Prerequisite(s): REAL 210.**

***Strongly Recommended: ENGL 099 if required by English exam or if required by English level.***

Elementary appraising with emphasis on residential properties using the three basic methods of estimating property value. This course is required to obtain California Real Estate Broker License. 54 lecture hours. CSU

### **REAL 220 (reactivated)**

#### **Real Estate Property Management**

**3 Units**

**Grade Only**

***Prerequisite(s): REAL 210.***

***Strongly Recommended: ENGL 099 if required by English exam or if required by English level.***

This course is intended for the real estate practitioner who wants a comprehensive introduction to the challenging field of property management and for the professional who wishes to gain new, practical information. 54 lecture hours.

### **REAL 224 (reactivated)**

#### **Escrow I**

**3 Units**

**Grade Only**

***Prerequisite(s): REAL 210.***

***Strongly Recommended: ENGL 099 if required by English exam or if required by English level.***

Escrow procedure involving processing real estate sales, loan, and business escrows; drawing and processing of documents, title search, title reports, prorations, legal requirements, and closing procedures. 54 lecture hours. CSU