

# TEK 131 CAD-Advanced Applications 3-D

FALL 2023

Lecture - 28095
Lab - 24296
Location: LA Mission College -Internet 8-week Online Course ( <b>Canvas</b> )
Prerequisite: EGD TEK 121

**Instructor:** Sevana Avanessian

**Email:** [avaness3@lamission.edu](mailto:avaness3@lamission.edu)

Canvas Website	
<b>Lecture</b>	<a href="https://ilearn.laccd.edu/courses/254738/pages/egd-tek-131-lecture-late-fall-2023-s-avanessian">https://ilearn.laccd.edu/courses/254738/pages/egd-tek-131-lecture-late-fall-2023-s-avanessian</a>
<b>Lab</b>	<a href="https://ilearn.laccd.edu/courses/254739/pages/egd-tek-131-lab-late-fall-2023-s-avanessian?module_item_id=16503222">https://ilearn.laccd.edu/courses/254739/pages/egd-tek-131-lab-late-fall-2023-s-avanessian?module_item_id=16503222</a>

## Office hours:

Day	Time	Location
Thursday	6 pm - 8 pm	Zoom Virtual Meetings
Or by appointment		

**NOTE: First Office Hours of Fall '23 Session B will be Sat, October 28, 10am - 12pm.**

All proceeding office hours will be on Thursdays as indicated above, unless otherwise notified.

For remote office hours via zoom, upon entry you will be placed in the waiting room before moving into the main zoom session. Please log into Canvas to view your class Calendar for Zoom Meeting Invitations

## Fall 2023 –Session B- IMPORTANT DATES:

DAY AND EVENING CLASSES BEGIN	Oct 23, 2023
Last Day to drop with Refund	Oct 27, 2023
Last Day to Add with Add Permission Code	Nov 01, 2023
Last Day to Drop with No Penalty	Nov 01, 2023
Last Day to Drop with "W"	Dec 03, 2023
Last Day of Instruction	Dec 10, 2023

FINAL EXAMS

Dec 11 – 17, 2023

## General course description:

This course is CAD Advanced Applications to learn advanced skills in modeling and prepare students to take the CSWA exam. Students will receive a CSWA voucher to apply to take the CSWA exam at the successful completion of this course.

This class requires students to work online independently each week for a minimum of 3 hours in addition to completing assignments. Lecture and Lab courses are taught in tandem with each other. Lecture courses and assignments should be reviewed and completed before Lab assignments are attempted.

## Course Schedule:

	Lecture	Lab
Week 1	<ul style="list-style-type: none"><li>• <b>The SOLIDWORKS Certification Process</b></li><li>• <b>Skills Review</b></li></ul>	<b>Essentials for Parts Design Practices:</b> Sketching: Door Handle, Part Design: Fan Assembly: Universal Joint
Week 2	<ul style="list-style-type: none"><li>• <b>Mold Tools - Core and Cavity</b></li><li>• <b>Fastening Features</b></li></ul>	<b>Practice Exercises:</b> Splitting a Part Cores and Pins Fastening Features
Week 3	<b>CSWA Prep:</b> Drafting Competencies - Drawing Views	<b>Practice Exercises:</b> Drawing Views
Week 4	<b>CSWA Prep:</b> Interpreting Drawings for 3D Modeling + Guided Exercises	<b>Practice Exercises</b> - Interpreting Drawings for 3D Modeling
Week 5	<b>CSWA Prep:</b> Guided Practice Exam - Basic/Intermediate Part Creation	<b>Practice Exercises</b> - Basic/Intermediate Part Creation
Week 6	<b>CSWA Prep:</b> Guided Practice Exam - Intermediate/Advanced Part Creation	<b>Practice Exercises</b> - Intermediate/Advanced Part Creation
Week 7	<b>CSWA Prep:</b> Guided Practice Exam - Assembly Modeling	<b>Practice Exercises</b> - Assembly Modeling
Week 8	Set up for Mock Exam	<b>Mock CSWA Exam - Final</b>

## Course Objectives

Objective 1	Discuss and review advanced SolidWorks Mold tools to design a functional plastic injection mold from an object.
Objective 2	Prepare for CSWA by reviewing exam topics, methods, and simulating a real exam to build and modify parts and an assembly in a timed real test setting.

## Student Learning Outcomes:

Objective 1	Use SolidWorks software to create functional molds and practice 3D modeling of advanced parts and assemblies.
Objective 2	Demonstrate mastery in the material by taking and passing the Certified SolidWorks Associate Certification (CSWA) mock exam.

## Grading system:

Homework	15%
Chapter Quizzes	15%
Participation	10%
Final Exam (mock CSWA Exam)	50%

**90 - 100% A**

**80 - 89% B**

**70 - 79% C**

**60 - 69% D**

**0 - 59% F**

At the end of this course, for your final exam you will be scheduled take a mock 3 hour exam via virtual examination. Please allocate the time, access to software and internet in order to take the exam. All instructions for set-up will be described in detail in the canvas Lecture course.

For class grading borderline cases, homework completion, participation, and level of improvement on the final are considered.

## Gradebook Access:

To view your grade in the course at any time during the semester, click the [“Grades” navigation tab in Canvas](#).

## Requirements and Recommended Material for this course:

### Textbook:

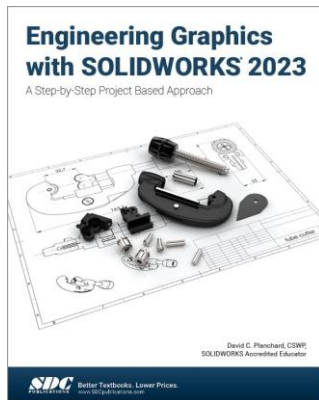
### Engineering Graphics with SOLIDWORKS 2023

By David C. Planchard

Publisher: SDC

ISBN: 978-1-63057-568-7

Software: SolidWorks 2022-2023 – See Canvas course



### Standards for Student Conduct:

Dishonesty, such as cheating or knowingly furnishing false information to instructors and college personnel, turning in work that is not one's own will be grounds for disciplinary action at LAMC according to the Standards of Student Conduct as described on the LAMC Catalog. The penalty may range from no credit for the assignment up to an "F" grade and disciplinary action. Students are expected to adhere to all school policies, and to abide by the standards of student conduct as described in the LAMC catalog. Any infringement upon the rights of other students in the class will not be tolerated. Please refer to [LACCD Board Rule 9800](#) for further information.

### Exclusion Policy:

If you fail to login to Canvas and complete the orientation and the expected assignments during the first week of the course, you will be excluded from the course as a NO SHOW. After that, I may still drop you for lack of activity (not logging into Canvas and not submitting assignments for consecutive weeks). If you wish to drop the class, you must drop the class yourself, officially. Failure to do so may result in a grade of "F" in the class. A new state policy in effect as of 2012 limits students to three attempts per course. Receiving a grade or a "W" for a course counts as an attempt, regardless of when the course was taken. Withdraw by the deadline of February 19, 2023 to avoid a "W". For Spring 2023 the deadline to drop with "W" is May 7, 2023. The procedures for dropping classes are detailed in the current Los Angeles Mission College Catalog.

## Communication Policy:

**Pay attention to my emails and canvas announcements, which will be my main communication channel to you.**

You can use the inbox option in Canvas to communicate with me. I respond to emails within 24 hours with the exception of weekends and Holidays.

This is an online course and all of our interactions will occur in Canvas. Please expect frequent communication and feedback from me via inbox message, announcements, assignment feedback, and discussion forums. Ultimately, we will regularly and substantively interact with each other many times each week, throughout the term.

## Success and Study Tips:

Successful students for online math courses are self-motivated and highly disciplined. You should try your absolute best to consistently follow the weekly schedule (weekly modules) and not fall behind. A minimum of 12 hours per week study time is expected for the course.

## Accommodations for DSPS students:

LAMC students with verified disabilities who are requesting academic accommodations should use the following procedure:

- i. Obtain documentation of your disability from a licensed professional. You can use the [LAMC Disability Verification Form](#). Students exiting high school can use their IEP as a qualifying document.
- ii. Make an appointment with a Disabled Students Programs and Services (DSP&S) Counselor or Specialist to review your documentation and discuss reasonable accommodations. Please call DSP&S at (818) 364-7732 or use the Online Counter Support on the [DSP&S page](#) to schedule an eCounseling appointment.
- iii. Bring your disability documentation to your DSP&S eCounseling appointment, which will be held through Cranium Café. Be sure to use a laptop or computer with Chrome or Firefox (no smart phones) and a working video camera and microphone.
- iv. Every semester, you are required to meet with your DSP&S Counselor to review your academic progress and accommodation letter. After meeting with them, your written accommodation agreement will be emailed to your professor(s).

Please complete this process in a timely manner to allow adequate time to provide accommodation. Students who have questions with technology accessing Cranium Café or the webpage should send an email to Online Counter Support for further assistance; contact Adrian Gonzalez at [gonzala@lamission.edu](mailto:gonzala@lamission.edu) or Rachel Povolotsky at [povolor@lamission.edu](mailto:povolor@lamission.edu).

## Management of Stress and Mental Health:

If you, or someone you know is in distress due to the pressure of succeeding in school and contending with work, financial issues, relationships, managing time effectively, getting enough sleep, etc., please visit the Student Health Center (SHC), which offers a broad range of confidential student services including counseling and mental health services. The SHC is located in the Administrative Services Building. The SHC webpage is [lamission.edu/healthcenter](http://lamission.edu/healthcenter) and the phone number is 818-362-6182. The National Suicide Prevention Lifeline number is 800-273-8255.

## Resources:

- **Bookstore:** For hours of operation, book availability, buybacks, and other info. call (818) 364-7798 or 364-7768 or visit <http://eagleslanding.lamission.edu/>
- **Counseling Department:** For appt. and info call (818) 364-7655 or visit <https://www.lamission.edu/counseling/>
- **Extended Opportunity Programs and Services:** For appt. and info. Call

(818) 364-7645 or visit <http://www.lamission.edu/eops/>

- **Financial Aid:** For info. and applications call (818) 364-7648 or visit <http://www.lamission.edu/financialaid/>
- **Library:** For info. on library hours, resources, workshops, and other services contact (818) 364-7105 or 364-7106 or <http://www.lamission.edu/library/>
- **STEM Program:** For those interested in pursuing a science, technology, engineering and math, please call the STEM counselor at (818) 364-7600 (ext. 4161) <http://www.lamission.edu/stem/>