Mt. San Antonio College DISTANCE LEARNING COURSE AMENDMENT FORM (REQUIRED)

Process Flowchart

(for new DL courses or amendment of existing traditional courses)

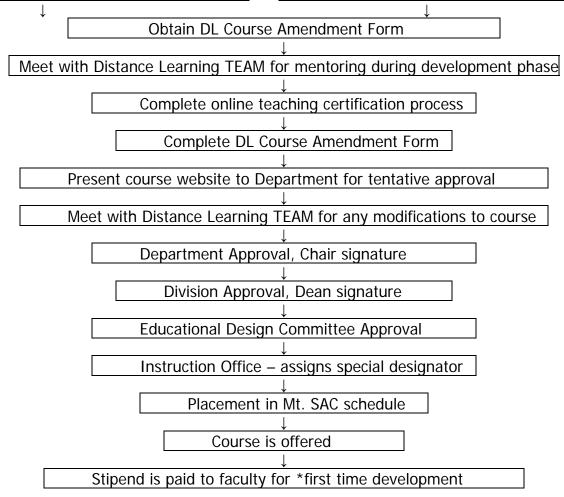
For existing courses, obtain (from ICCIS) and attach to this form:

- course description
- current course outline
- measurable objectives
- methods of evaluation and sample assignments

Course information must have been updated within the last four years

For new courses, create and attach to this form:

- course description
- current course outline
- measurable objectives
- methods of evaluation/sample assignments



^{*}The first DL course that is developed by a faculty member results in a stipend being paid to the faculty member in the amount of \$1000 after the course is offered and taught by that faculty member. Subsequent course(s) and web development does not result in any further stipend. Training, workshops, and resources are available for faculty from Online Learning Support Center and Staff & Organizational Learning.

Mt. San Antonio College DISTANCE LEARNING COURSE AMENDMENT FORM

(REQUIRED)

Course Title Engineering CAD 3D Solids and Surfaces

Prefix/Number <u>EDT 24</u>

Developer Tom Vela Date 11/14/06

Department Department of Architecture & Engineering Design Technology

Course Content:

Course content of this Distance Learning course must match the approved curricula (course topics, measurable objectives) for the regular course, currently on file. The faculty member submitting this amendment and his/her Department are responsible for reviewing the Distance Learning course content to see if the course outline and measurable objectives may be achieved in the Distance Learning mode selected. To achieve this match, obtain a copy from ICCIS of the current curriculum for the regular course (or create a new curriculum for a new course). Attach that information to this document. In addition, all distance learning course content must be accessible to students with disabilities. For aid in developing accessible course materials, contact Disabled Students Programs and Services.

Delivery:

Any Mt. SAC course that replaces seat time with online learning must have this Form completed and approved. The State of California defines a Distance Learning course as one in which the student's seat time has been replaced at least 51% of the time by distance learning. Mt. SAC's distance learning courses (online and hybrid) are courses that have regularly scheduled replacement of seat time, and are published accordingly in each Mt. SAC Schedule. What percentage of seat time will be replaced by distance learning in this course?

40 – 55 % (Min and Max when replacing either lecture or lab seat time)

Meet with the Online Learning Faculty Mentor (x6614) in order to begin the process of adapting traditional course components for online delivery. Some measurable objectives may not be feasible in the DL mode, and the developer may then plan for a hybrid delivery instead of a strictly online delivery mode. Use the tables provided in **Supplemental Information on the Methods of Instruction** and the **Course Weekly Schedule of Activities** below to begin the transformation to online learning components and their delivery. Also, begin development of a course web site to deliver the course materials to students. After the course web site is developed, the new course delivery and web site can be presented to the department for their approval.

Course Information:

Develop a course web site for your distance learning students to use during the course. If you need help in creating web pages, contact the Online Learning Support Center at x5016 or the Online Learning Faculty Mentor (x6614) for assistance. A well-developed course web site should include:

- Course outline (of record)
- Learning objectives/outcomes
- Syllabus
 - Schedule of weekly activities (assignments and deadlines)

- Instructor contact information
- Grading policy
- Attendance policy
- Make-up policy for missed work
- o Campus policies add/drop, academic dishonesty, repeating courses
- o Departmental intervention plan for repeating of courses
- FAQs
- Student and instructor expectations
- Accommodations for disabled students
- A variety of web-based learning materials
- Discussion forum (within or out of course web site)
- Interactive and relevant links to assignments or activities
- Site map
- Course web site organized around themes or chunks of information

Course web site address: http://elearn.mtsac.edu/tvela/edt24/ and Blackboard will be used as the main online delivery for this course.

(If a UserID and Password are required to view your web site, please provide that information to Kerry Stern, Dean of Learning Resources, x5658)

Student – Instructor Contact:

Title 5 Regulations, and the California Board of Governors for the California Community Colleges, require that course quality standards are met (same as applied to traditional courses) and that regular, effective contact between the student and instructor are included in the design of the course. Please complete the following **Supplemental Information on the Methods of Instruction** and the **Course Weekly Schedule of Activities**, being as descriptive and specific as possible.

X Web design workshops: (X _Mt. SAC _Other Adobe Acrobat, Adobe Photoshop, Online Teaching Staff Devel. software)
X Course management training: (X Mt. SACOther Blackboard System)
Online courses: (Mt. SACOther Course)
X *Date of Certification for online teaching (required):05/06
X Other experience: Developed a website for traditional courses where students have access to online grade records, online reference links, and have used online tutorials to teach traditional courses http://elearn.mtsac.edu/tvela/
Do you have a computer that you will use to manage this course? YesX_ No
If yes, tell us about your computer: PC_X_ Mac Year _2001 and 2004_ Mt. SAC X Yours X
What additional equipment or software do you need to manage this course most effectively?
Computer Printer FAX Other X
Software = Adobe Acrobat and SolidWorks for home PC

Course Management and Tools:

How will your course be delivered, managed, and maintained?					
X FrontPage Web on Mt. SAC server	X Web pages on another server				
WebCT	X _ Blackboard				
eCollege	Other				

Instructional Design:

Some questions to consider, in the design of your course:

1. How will interaction(s) with the instructor and among the students be accomplished?

The instructor will interact with the students in several ways:

- Traditional Classroom meetings, 50% of the class will be at Mt. SAC with traditional delivery.
- Live communication using a computer with Whiteboard or verbal contact over the phone
- Email through Mt. SAC or messages through Blackboard
- Traditional and online office hours.
- Students will send drawing assignments to be graded as attachments in Blackboard (BB), which can be graded and marked with corrections and sent back for students to revise drawings. Students will read and answer questions on assigned text chapters. Discussion forums will also be a way of interacting with students.
- Calendar to keep students on task 6) Discussion Forums
- Announcements Online
- Online viewing of grades and instructor feedback of graded assignments
- 2. What will make this interaction effective?

To make all the face to face interaction effective in this course:

- There will be mandatory meetings for week one and week two on campus.
- Students will meet once a week in a traditional lecture lab. Traditional meetings will be to discuss and lecture on the weekly assignments and keep students on task. The traditional meeting will serve as important face to face contact to give the students a sense of security and of belonging to a class so when problems arise they can be solved. Students can submit printed drawing assignments or homework at the traditional meetings and clear up any questions they may have during this time to help them do assignments with minimum confusion or stress and a maximum amount of success.

For online interaction:

- ANNOUNCEMENTS: Weekly announcements will be posted by the instructor. These
 announcements are very important to keep students informed and motivated as well as keep
 them on task in their learning. Banners will change from time to time to stimulate discussion or
 bring a bit of humor to the class.
- DISCUSSION FORUM: Bi-weekly DF questions will be posted so students can express thoughts in writing and give opinions they may not feel comfortable expressing in class. It will require a higher level of thinking and give all a chance to participate. This method also provides students a way to research thoughts before posting answered questions. It will allow them to be heard by all and get feedback on their thoughts in a non-threatening, constructive manner. Students will be required to post answers to the original question or to other student replies. The instructor can easily see the post and make comments or provide a different point of view to the posts. The post will be graded by the instructor as part of the class requirements.
- EMAIL AND MESSAGING: Students can communicate to each other and the instructor using email

and messaging in BB. They will be required to maintain and check their Mt. SAC email accounts weekly. Private communication is important so students can seek feedback or ask questions via messages about drawing problems or steps they do not understand. This communication will avoid confusion for the students. This communication will allow drawings to be done correctly and on time. Students can submit drawing assignments with eDrawings (a component of SolidWorks, the software used in the class). With eDrawings, students can email his or her drawing assignment for graded feedback and make needed revisions. Students will be using the industrial model of this process for revising work.

- Course CALENDAR: The instructor will provide a calendar OL to keep students up to date and on task. Students will always be aware of what is expected though out the semester. All assignments and deadlines for the semester are provided in the calendar. This is important to keep students motivated and on task to meet required deadlines. Students can be kept informed as to any system/server problems that may arise though email. Also, if there is a need for the instructor to miss class (traditional meetings) communication can be provided.
- ONLINE TUTORIALS/DRAWING ASSIGNMENTS: The Students create drawings and will submit the online tutorial assignments as an attachment through BB for grading. The instructor will provide feedback and grades online so students are always informed and can revise drawing assignments for the final portfolio submittal.
- ONLINE CHAPTER READINGS and SUMMARY QUESTIONS: The instructor will provide summary
 questions at the end of each required chapter. These questions require students to read and
 write out answers to additional information that might not be covered on drawing assignments.
 The information obtained from the questions will be used as study guides for test. Students will
 submit the answers for grading. All work will be read and scored by the instructor and sent back
 to the students with comments for continuous learning.
- TRADITIONAL FACE to FACE MEETINGS: Traditional meetings in class will be required. Students will be required to attend mandatory meetings the first 2 weeks of the semester. All course requirements and online navigation skills will be covered. Students will be required to meet once a week for in-class lectures and to submit work that needs in class plotting/printing. At this time questions can be cleared up for the week to come. Students can keep on task and can be sure their progress is in a positive direction. Classroom meetings are needed to be sure the construction of their final portfolio is successful. Students can meet with the instructor during meetings for portfolio development feedback.
- TUTORIAL ASSISTANCE: The Architecture and Engineering Design Technology Department will provide tutors for students requiring extra help as needed and as funds for tutors remain available.
- ONLINE OFFICE HOURS: The instructor will hold online office hours. A student can make an
 appointment to communicate and resolve any questions or problems they may have. This again
 aids in the communication for students. Having the ability to reach and discuss any problems
 reassures students they can get help when needed.
- ONLINE INSTRUCTOR DEMONSTRATION: Online Demos will be provided as needed to assist students on difficult problems. These demos are recorded with voice and on screen capturing from the PC. They will be available from the elearn site so students have access 24/7. Students can also burn the demo files from the lab as alternative way to view demos. These recorded voice and screen captured demos will help slower students with their problems and they can be viewed as frequently as needed to learn the assigned task.
- PORTFOLIO This task is an accumulation of the semester work that has been corrected and reprinted in a presentational format. The portfolio is an example of a student's skills to show to future employers. The portfolio is the final graded project, with feedback given to the students.

- 3. What problems do you expect to encounter with these interactions?
 - In order to understand the process of online learning there will be a steep learning curve for the first two weeks. To assist the students there will be two mandatory meetings each week. The instructor will demonstrate all the online technology at this time. BlackBoard will be used to deliver the online portion of the course. Students will be instructed at this time how to use and communicate with the instructor.
 - Students having software problems or students without broadband have access to the labs at Mt. SAC or can go to any facility with broadband to interact with the instructor.
 - Students that do not have the current version of Solidworks could also be a problem. Saving
 work on the current version will not allow students to revert back if they own an older version of
 the software. Students will be made aware of the fact that they can use the labs in the
 department to complete assignments during non class hours.
 - Students may underestimate the amount of time necessary to be successful in an OL class. The instructor will encourage all students to check email, messages, the DB, the calendar, and put in the effort needed to be successful.
 - The problem of not having enough space on BB for this class could arise because of the large files that are produced in CAD courses. Hopefully the OL support here at the college can address that before it happens and allow CAD courses more space for students.
 - There are always unforeseen situations such as power failures, PC crashes.
- 4. How will you enhance student learning through the use of the Internet?
 - Email, messages, and file submittal are a few of the ways the internet will be used.
 - The internet is a great research tool. The students will be able to research designs of all types that will be discussed in the DB. This tool exposes students to many different areas of design and will provide many ways of seeing and thinking to create or produce their own designs.
 - The Internet is a way to deliver AVI recorded demonstrations to help clarify assignments to the students.
 - SolidWorks has a design library that works directly from the internet to download common parts used in drawings. Students can access the Internet directly while in SolidWorks.
 - The internet can be used by students to download plug-ins such as eDrawings. EDrawings works as a solid modeling viewer and a vehicle to send drawings though email as attachments.
- 5. How will you handle assessments (exams, quizzes, etc.)?
 - Students will come to campus for the midterm and the final exams.
 - Graded drawings will be assessed in either the traditional method or online. Students can email drawings or bring them into the weekly meeting.
 - Graded work from chapter summaries.
 - A submitted final portfolio is required for this class. This is an accumulation of all drawings that
 has been revised and corrected. It is printed and bound in a presentation. It can be used by
 students as a tool when seeking employment.
- 6. How will you handle students who need more attention?
 - The office hours mentioned above takes care of many of these problems. Students can also attend my regular office hours.
 - My elearn website contains instructor made Demos. These are AVI files that students can access online. Students can view these demos using a regular viewer that is supplied with windows. These AVI files are small sized movies of lectures from my traditional classes on the difficult

- material.
- Students can contact the instructor during online office hours.
- Work with students one-on-one during the weekly traditional class meetings to be sure they leave the class understanding the material.
- Provide tutors for slower students.
- 7. How do you plan to evaluate the effectiveness of this course?
 - Since the curriculum is taught in a traditional method, the instructor will compare it to these classes. (Retention, class average, etc.)
 - The instructor will have students evaluate the course through the elearn questionnaire offered by Mt. SAC and request those that drop the course to email me the reason why they have decided to drop the class.
 - Feedback from student evaluations.
- 8. How do you plan to provide "alternate media" for students with disabilities?

The CMS has instructions for those that need additional help on how to contact DSPS. All online videos and demos will be closed captioned. All graphics will be alt tagged.

Mt. SAC Student Resources:

What campus resources will you or your students need for this Distance Learning course?

<u>X</u>	_SOLAR: Skills for Online Learning – Assessment of Readiness *Would help but not required (http://elearn.mtsac.edu/olsc/readiness)
X	_Learning Resources (Library – http://library.mtsac.edu)
X	_LTC/Learning Assistance Center (tutoring – http://ts.mtsac.edu)
Х	_ Placement/Assessments (English, Math, Chemistry, etc.) *Similar to traditional classes
Χ	_DSP & S accessibility adaptation
<u>X</u> broadl	Architecture and EDT Labs will be open for student use. *Will assist those without band

Future Support and Certification Needed:

What additional training or technical support will be needed to create this Distance Learning course?

- Training in my discipline and current online teaching techniques.
- Provide enough space on BB to fully support a CAD course online.

Supplemental Information on the Methods of Instruction in a Distance Learning Course

Please use the table below to describe each method of instruction/learning that is to be used in this Distance Learning course. Use a unique abbreviation for each method listed, that later can be placed in the **Course Weekly Schedule of Activities** (following this table). Provide a detailed description of each method or activity, and clearly explain how a student will use this method. Also, indicate whether this activity is an active or passive learning method for the student. An example is provided. **This information will become a part of the official course information, so include all methods that may be used.**

Abbreviation	Detailed description of method/activity	Active or Passive? (A or P)
ОСМ	ON CAMPUS MEETINGS: Students will meet on campus once a week with the instructor to learn how to use various technologies that will be used in this course. Traditional lecture and lab time will be used at these meetings to keep students on task and help students with any problems that may arise.	Α
DF	DISCUSSION FORUM: Bi weekly DF questions will be posted so students can express thoughts in writing and give opinions they may not feel comfortable expressing in class. It will require a higher level of thinking and give all a chance to participate. This method also provides students a way to research thoughts before posting answering questions. It will allow them to be heard by all and get feedback on their thoughts in a non threatening constructive manner. Students will be required to post answers to the original question or comment on other student replies. The instructor can easily see the post and make comments or provide a different point of view to the posts. The post will be graded by the instructor as part of the class requirements.	Α
Α	ANNOUNCEMENTS: Weekly announcements will be posted by the instructor. They are very important to keep students informed and motivated as well as keep them on task in their learning. Banners will change from time to time to stimulate discussion or bring a bit of humor to the class.	Р
СС	COURSE CALENDAR: The instructor will provide a calendar OL to keep students up to date and on task. Students will always be aware of what is expected though the semester. All assignments and deadlines for the semester are provided here. This is important to keep students motivated and on task to meet required deadlines.	Р
EM	EMAIL AND MESSAGING: Students can communicate with each other and the instructor using email and messaging. They will be required to maintain and check their Mt. SAC email accounts weekly. Private communication is important so students can seek feedback or ask questions via messages about drawing problems or steps they do not understand. They will be required to maintain and check their Mt. SAC email accounts weekly. Private communication is important so students can seek feedback or ask questions via messages about drawing problems or steps they do not understand. This will avoid confusion for the students. This communication will allow drawings to be done correctly and on time. Students can submit drawing assignments with eDrawings (a component of SolidWorks, the software used in the class). With edrawings, students can email his or her drawing assignment for graded feedback and make needed revisions. Students are modeling how industry uses this process for revising work.	Α
OLT/D	ONLINE TUTORIALS/DRAWING ASSIGNMENTS: The Students will submit the online tutorial assignments as an attachment through BB for grading. The instructor will provide feedback and grades online so students are always informed and can revise drawing assignments for the final portfolio submittal.	Α
TA	TUTORIAL ASSISTANCE: The Architecture and Engineering Design Technology Department will provide tutors for students requiring extra help as needed and as funds for tutors remain available.	Α

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Abbreviation	Detailed description of method/activity	Active or Passive? (A or P)
TL	TRADITIONAL LECTURES: Weekly on campus meetings, with guided practice and lab time.	A/P
DEMO	ONLINE INSTRUCTOR DEMONSTRATION: Online Demos will be provided as needed to assist students on difficult problems. These demos are recorded with voice and on screen capturing from the PC. They will be available from the instructor's elearn site so students have access 24/7. Students can also burn the demo files from the lab as an alternative way to view them. These recorded voice and screen captured demos will help slower students with the problems and they can be viewed as frequently as needed to learn the assigned task.	A/P
SQ	ONLINE CHAPTER READINGS and SUMMARY QUESTIONS : The instructor will provide summary questions at the end of each required chapter. This allows the students to read and write out answers to additional concepts not covered on drawing assignments. Students will submit the answers for grading. The information obtained from the questions will be used as study guides for test/assessments. All work will be read and graded by the instructor then sent back to the students with comments for continuous learning.	А
OLOH	ONLINE OFFICE HOURS: The instructor will hold online office hours. A student can make an appointment to communicate and resolve any questions or problems they may have. This again aids in the communication for students. Having the ability to reach and discuss any problems reassures students they can get help when needed.	Α
тон	TRADITIONAL OFFICE HOURS: Students will have access to the instructor's traditional office hours. Any online student can meet with the instructor as need during regular on campus hours.	Р
PORT	PORTFOLIO – This is an accumulation of the semester work that has been corrected and reprinted in a presentational format. The portfolio is developed to show student's skills to future would be employers. The portfolio is the final graded project with feedback given to the students.	Α
EX	EXAMS – The midterm and final will be given on campus. These are required classroom meetings in the Arch and EDT Department during normal traditional meeting hrs. Students will be given a written and practicum.	Α

Course Weekly Schedule of Activities

Enter the information from ICCIS, the traditional method of course content delivery, and the abbreviations used from the above table on the DL course delivery in the appropriate box below. Estimate a student's time on task expected for each activity listed.

Week	Topic(s) Covered (matches ICCIS)	Traditional Course	Hybrid DL Course	Estimated time on task (hrs)
1	Module One - Orientation, File Manipulation	Listen to lecture in class, do lab work, Enter Windows and create a logon password. Develop personal file folders for storage of assignments, develop teams, read text, answer questions, and attend office hours if needed.	OCM, CC, OLT/D, SQ, A, TL, EM, OLOH,TOH	OCM 6 hr CC .1 hr OLT/D 4 hr SQ .5 hr A .1 hr TL 1 hr
2	Module Two – Sketching, Profiling, Constraining and Dimensioning.	Listen to lecture in class, do lab work, Drawing preference setup. Create simple parts by sketching outlines. Profile, constrain and dimension sketched outlines., meet with team, read text, answer questions, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, EM, OLOH,TOH,DF	OCM 6 hr TL 1 CC .1 hr OLT/D 4 SQ .5 A .1 DEMO .5 hr DF .5 hr
3	Module Three – Constraining, Dimensioning and Extruding Parts	Listen to lecture in class, do lab work, Drawing preference setup. Create simple parts by sketching outlines. Profile, constrain and dimension sketched outlines. meet with team, read text, answer questions,, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, EM, OLOH,TOH	OCM 3 hr TL hr CC .1 hr OLT/D 4 A .1 DEMO .5 hr SQ .5 hr
4	Module Four – Viewing, Revolving, Sweeping and Editing Parts	Listen to lecture in class, do lab work, Drawing preference setup. View models from different viewpoints. Revolve a profile into a part. Sweep a profile into a part. Edit features of parts, meet with team, read text, answer questions, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, DF, EM, OLOH,TOH	OCM 3 hr TL 1hr CC .1 hr OLT/D 4 A .1 hr DEMO .5 hr SQ .5 hr DF .5 hr
5	Module Five – Work Planes, Sketch Planes, Work Points, Work Axis, Visibility Options	Listen to lecture in class, do lab work, Drawing preference setup. Create work axis. Make a plane active in a sketch. Describe difference between a sketch plane and a work plane. Create a work plane. Create work points. Control the visibility of objects, meet with team, read text, answer questions, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, EM, OLOH,TOH	OCM 3 hr TL 1hr CC .1 hr OLT/D 4 A .1 hr DEMO .5 hr SQ .5 hr

Course Weekly Schedule of Activities

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Week	Topic(s) Covered (matches ICCIS)	Traditional Course	Hybrid DL Course	Estimated time on task (hrs)
6	Module Six – Cut, Join, Intersect Options, Adding Features.	Listen to lecture in class, do lab work, Drawing preference setup. Explain the term "feature". Create and modify existing parts using: Cut, Join, and Intersect Options. Use the browser to edit, rename, copy, delete and record features, meet with team, read text, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, DF, OLOH, TOH, EM	OCM 3 hr TL 1hr CC .1 hr OLT/D 4 A .1 hr DEMO .5 hr SQ .5 hr DF .5 hr
7	Module Seven – Features Fillets, Chamfers, Shells, Lofts	Listen to lecture in class, do lab work, Drawing preference setup. Create four types of fillets. Create Chamfers. Create holes. Create and edit arrays, meet with team, read text, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, OLOH, TOH, EM	OCM 3 hr TL 1hr CC .1 hr OLT/D 4 A .1 hr DEMO .5 hr SQ .5 hr
8	Module Eight – Advanced Dimensioning, Constraining and Sketching Techniques	Listen to lecture in class, do lab work, Drawing preference setup. Create relationships between drawings Create a profile using existing geometry, convert existing geometry 2D drawings into parametric sketches, meet team, read text, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, DF, OLOH, TOH, EM	OCM 3 hr TL 1hr CC .1 hr OLT/D 4 A .1 hr DEMO .5 hr SQ .5 hr DF .5 hr
9	Module Nine - Midterm	Study for test and take test under the supervision of instructor.	OCM, TL, CC, OLT/D, A, SQ, EM, OLOH,TOH, EX	OCM, EX 3 hr TL 1 hr CC .1 hr OLT/D 4 SQ .5 OLOH 1 hr A .1 hr
10	Module Ten - Advanced Dimensioning, Constraining and Sketching Techniques	Listen to lecture in class, do lab work, Drawing preference setup. Create and edit multiple parts in a single file. Listen to lecture in class, do lab work, create final project assembly. meet with team members, read text, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, DF, OLOH, TOH, EM	OCM 3 hr TL 1 hr CC .1 hr OLT/D 4 A .1 hr DEMO .5 hr SQ .5 hr DF .5 hr

Course Weekly Schedule of Activities

Enter the information from ICCIS, the traditional method of course content delivery, and the abbreviations used from the above table on the DL course delivery in the appropriate box below. Estimate a student's time on task expected for each activity listed.

Week	Topic(s) Covered (matches ICCIS)	Traditional Course	DL Course	Estimated time on task (hrs)
11	Module Eleven – Advanced Modeling Techniques Sweeps	Listen to lecture in class, do lab work, create final project assembly. meet with team members, read text, and attend office hours if needed.	OCM, TL, CC, OLT/D, A, DEMO, SQ, OLOH, TOH, EM	OCM 3 hr TL 1 hr CC .1 hr OLT/D 4 A .1 hr DEMO .5 hr SQ .5 hr
12	Module Twelve – Assemblies and 3D Constraints	Listen to lecture in class, do lab work, create final project assembly. meet with team members, read text, and attend office hours if needed. Develop final portfolio.	PORT, CC, OLT/D, A, DEMO, SQ, DF, EM, OLOH,TOH,	PORT 6 hr CC .1 hr OLT/D 4 A .1 hr DEMO .5 hr SQ .5 hr DF .5 hr
13	Module Thirteen – Assembly Animation	Listen to lecture in class, do lab work, create final project assembly, create and print portfolio, and attend office hours if needed. Develop final portfolio.	PORT, CC, OLT/D, A, EM, OLOH,TOH,	PORT 6 hr CC .1 hr OLT/D 4 A .1 hr
14	Module Thirteen – Assembly Animation	Listen to lecture in class, do lab work, create final project assembly, create and print portfolio, and attend office hours if needed. Develop final portfolio.	PORT, CC, OLT/D, A, EM, OLOH,TOH,	PORT 6 hr CC .1 hr OLT/D 4 A .1 hr
15	Module Fourteen – Portfolio Development Final Review	Create final plots for assembly and assemble into a final portfolio, office hours if needed.	PORT, CC, OLT/D, A, EM, OLOH,TOH,TA,	PORT 6 hr CC .1 OLT/D 4 A .1 hr
16	Module Fourteen – Portfolio Development Final Review	Create final plots for assembly and assemble into a final portfolio, office hours if needed. Final test.	OCM, EX, PORT, CC, OLT/D, A, EM, OLOH,TOH,TA,	OCM, EX 2.5 hr PORT 6 hr CC .1 OLT/D 4 A .1 hr

DISTANCE LEARNING COURSE AMENDMENT FORM

Verification of Process

The following steps must be signed and approved in this order.

	ig realli (laculty irolli b	istance Leanini	g committee / OLFM)	
Date:				
2. Presentation to	Department			
Department:	Approval	Denial	Date	
Signature(s)				
Recommendations:				
3. Division:	Approval	Denial	_ Date	
Div. Dean Signature_				
4. Educational Des	ign Cmte: Approval	Denial	_ Date	
	re			
-				
icason for uchial				

5. Date Received in Instruction Office: _____