Application for a New Course v10.5

Course ID *Subject and Number*	DET 230
Date APPROVED	
Date DENIED	

I. Systems and Catalog Information Complete each item.

1	Course Developer	Brian G. Burton
2	Course Teacher	Bryon Caldwell
3	Course Title	Introduction to Animation: Keyframes & Pixels
4	Course Abbreviation (if title is over 30 characters)	Intro to Animation
5	College	COBA
6	Department	SITC
7	Number of Credit Hours	3
8	Is the course Fixed Credit or Variable Credit?	Fixed
9	Is the course repeatable?	No
10	Maximum number of times course may be repeated	
11	Maximum number of hours credit	
12	Explanation for variable credit	
13a	Course contact hours - LEC	3
13b	Course contact hours - Lab	0
13c	Course contact hours -	3

	Practicum	
13d	Course contact hours - Seminar	
13e	Course contact hours - Studio	
13f	Course contact hours - Online	
13g	Course contact hours - Colloquium	
13h	Course contact hours – Field Experience	
13j	Course contact hours - Internship	
13k	Course contact hours - Research	
13m	Course contact hours - Workshop	
13n	Course contact hours – Other (specify)	
14	Instructor Workload	
15	Grade Mode (check all appropriate):	_X__Standard _X__Credit/No Credit (undergrad only)
16	Maximum Enrollment	15
17	**Catalog Description** (50 words or less)	Introductory course focusing on the principles and history of animation. The class will cover foundational techniques and theories developed by leading studios utilizing industry standard animation software. This class will introduce: the principles of animation, the history of animation, the basics of acting and an

		introduction to character animation
18	List any prerequisites (course/s, test scores, class standing, major, etc.)	None
19	List any co-requisites	
20	If the course is cross listed, specify the Course ID(s) MUST have signature in Section V off all Department Chairs	
21	Does this course have any special student costs? Yes/No *Attach a completed "Request to Add or Change Course Fees" form. Describe in section IV-F.*	
22a	How often will it be offered? **Fall**	X
22b	How often will it be offered? **Spring**	
22c	How often will it be offered? **Summer**	
23	Frequency? All, odd, or even years?	On Demand
24	First semester this course will be offered *New courses may not be taught under their approved course ID until they appear in the catalog, therefore, no earlier than the coming fall.*	Fall 2016
25	List course/s that should be deleted, include the last semester for course/s being deleted *A course cannot be deleted when it is a requirement in a degree plan in any department.*	
26	Is this course required for	No

	a degree/s? Yes/No *If "Yes," attach a revised degree plan(s) reflecting the placement of the new course.*	
27	Should the addition of this course be retroactively applied to the degree plan it supports? Yes/no and explain	No
28	Has this course been offered as a Special Topics course? Yes/No *If "Yes," specify the Course ID and enrollment for each term it was taught.* *(Note: New courses are NOT required to be taught as Special Topics courses prior to being approved. However, courses may be taught once as Special Topics before it is proposed. See the Course Descriptions section of the Catalog for details.)*	Yes Spring 2015, DET 240, 15 students Summer 2014, DET 340, 15 students
29	List any courses in which content overlaps the proposed course. (Course ID and Name) *Attach statement from instructor/dept chair of existing course justifying the new offering in Section IV-D.*	

II. Curriculum

1	**Degree Plan** Explanation of how this course affects degree requirements.	This course teaches valuable skills need by a large number of DET majors and minors.
2	**Justification** State the justification for adding this course to the current curriculum. Represent the need.	Being able to animate 3D models is a critical skill needed game development, 3D animation, and film production.

III. Course Design

1. Audience and Course Goal

1	Describe the intended audience, including prerequisite skills.	This course is designed to teach basic skills need by students entering game development, animation, and film production. This is an introductory course and has no prerequisite requirements.
2	State the overarching course goal(s) in performance terms.	To provide introductory training in the animation.

2. Competencies and Measurements

	Competency	Measurement
1	Demonstrate understanding of the 12 rules of animation.	Various projects; Grading Rubric for 3D Animation & Rigging
2	Demonstrate understanding of an animated walk cycle	Final project; Grading Rubric for 3D Animation & Rigging
3	Demonstrate foundational knowledge of body mechanics through assignments that feature the basics of human motion	Various projects; Grading Rubric for 3D Animation & Rigging
4	A brief history of animation and visual effects and profiles of key animators throughout history and why their contributions are important to the industry	Paper

3. Text and Resources

1. Give the full publication information of the textbook/s and other required resources and outside readings.

The Animator's Survival Kit by Richard Williams, Faber & Faber. ISBN 978-0571202287
The Illusion of Life by Frank Thomas & Ollie Johnston, Disney Editions. ISBN 978-0786860708

2. For **combined undergraduate/graduate** courses, make two lists:
    a. full publication information; label **Undergraduate**.
    b. full publication information; label **Graduate**. Indicate number of pages required.

IV. Supporting Documentation

Supporting documents must accompany proposal prior to preliminary approval by chair and dean.

	1	**Library** — Submit new course application and syllabus to the Dean of the Library. Consult with the director and establish a deadline for completion of the library report. **Attach** the signed copy of the Library report.
	2	**Instructional Design** — The application and syllabus must be reviewed by the Adams Center. **Attach** a copy of the Adams Center Review Letter.
	3	**Content Overlap** — Include one document for each course you listed in Section I-I. **Attach** statement from instructor/dept chair of existing course justifying the new offering.
	4	**Departmental Resources** — List the resources that support the course and are available only through the department, if applicable. **Attach** the list of the holdings and the location/s.
	5	**Resources** — List resources (other than library or departmental resources) that are needed to support this course (computers, lab equipment, other technology, etc.). **Attach** a complete list of all items and indicate possible sources or estimated cost of each. List the sources of any needed funds.
	6	**Expenses** — List additional expenses needed to implement this course (full-time or part-time faculty, graduate or lab assistants, student employees, travel, special student costs, room renovation, storage facility, etc.). **Attach** a complete list of all items, the estimated cost of each and the source of the funds.
	7	**Justification** — **Attach** all documents referred to in Section II-2
	8	Syllabus — **Attach** the syllabus for the course based upon the anticipated first-semester offering.
	9	Provide documentation for all additional attachments here

V. Preliminary Approvals

All supporting documentation has been assembled and attached to this application. I believe this course is ready to be presented to appropriate councils. We have a plan to fund this new course.

Course Number and Name Intro to Animation

Primary Department

Brad Cross
Department Chair

3/2/16
Date

Brad Cross
Dean of the College

3/2/16
Date

Cross-listing Department *Add more lines if multiple departments are cross-listing*

Department Chair

Date

Dean of the College

Date

Cross-listing Department *Add more lines if multiple departments are cross-listing*

Department Chair Dean of the College	
Date	Date

VI. Actions *Place all actions on one page.*

Course ID: _____

Course Title: Intro to Animation

1. **College Academic Council**: (for all courses)

Note: Insert additional lines for College Academic Council action for each college involved in cross-listed courses.

Approved ✓ Denied ___ Daniel Perkins (College Dean or Director) 3-1-16 (Date)

Approved ___ Denied ___ _____ (College Dean or Director) _____ (Date)

2. **Graduate Council**: (for graduate level courses)

Approved ___ Denied ___ _____ (Dean of Graduate School) _____ (Date)

3. **Teacher Education Council**: (when applicable)

Approved ___ Denied ___ _____ (TEC Chair) _____ (Date)

4. **University General Education Council**: (when applicable)

Approved ___ Denied ___ _____ (Provost's designee) _____ (Date)

5. **University Undergraduate Academic Council**: (*undergraduate level courses)*

Approved ___ Denied ___ _____ _____
Vice Provost Date

6. **Academic Provost**: (for all courses)

Approved ___ Denied ___ _____ _____
Provost Date

7. **President of the University**: (for all courses)

Approved ___ Denied ___ _____ _____
President Date

Attach notes, comments, or conditions from appropriate councils:

ABILENE CHRISTIAN UNIVERSITY

LIBRARY

M E M O R A N D U M

DATE: March 2, 2016

TO: Dr. Brian Burton

FROM: Mark McCallon, Associate Dean for Library Information Services

RE: Course Application – Intro to Animation: Keyframes and Pixels

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After reviewing the course proposal and course syllabus, the library can adequately support the proposed course. Please contact Mark McCallon (mccallonm@acu.edu) , Librarian Liaison to the College of Business Administration, if additional library resources are needed for the course. Thank you for allowing us to review the course application and syllabus.

Tuesday, February 23, 2016

Abilene Christian University

Re: DET 2XX Application

Dear Bryon,

The Adams Center for Teaching and Learning has completed the review DET 2XX: Introduction to Animation. The syllabus was reviewed based on the ACU Syllabus Guidelines. The syllabus proposed meets or exceeds most of the expectations described in these guidelines.

Please address the following before submitting the syllabus to the Academic Council.

- List the number of credit hours to be earned for completion of this course.
- The proposed syllabus indicates that Blackboard will be used. Should this be updated to Canvas, our campus learning management system?
- Add the ACU Mission Statement to the syllabus.
- Please indicate who the intended audience is for this course.
- On the final copy of the syllabus, be sure to include the course calendar.

There is no need to return the syllabus to the Adams Center for further review. Of course, if you would like to discuss this suggestion or any other aspect of your syllabus or instructional strategies, please contact me and we will schedule a time as soon as possible. We are here to serve you as you help prepare students for Christian service and leadership throughout the world.

Grace and Peace,

David Christianson
Instructional Designer
Adams Center for Teaching and Learning
Abilene Christian University

ACU College of Business Administration
Course Syllabus
Intro To Animation: Keyframes and Pixels (DET 230)
Section 1
Spring 2016

Competence Character Community

Instructor: Bryon Caldwell
Phone: 214-578-9537
Email: bac14b@acu.edu

Office Hours: TBA and by appointment
Office:
Classroom: 302

"To glorify God by creating a distinctively Christian environment in which excellent teaching, combined with scholarship, promotes the intellectual, personal, and spiritual growth of business students, and educates them for Christian service and leadership throughout the world."

The COBA Mission Statement

Course Description

DET 230 Intro to Animation: Keyframes and Pixels – (3 Credit Hours) Introductory course focusing on the principles and history of animation in film and media. The class will cover foundational techniques and theories developed by leading studios such as Disney and Pixar utilizing industry standard animation software. The fundamentals of the class will include: the principles of animation, the history of animation, the basics of acting and an introduction to character animation.

Intended Audience:

Introduction to Animation is a beginning course intended for those who are new or have limited experience in animating 3D models.

ACU Mission & Promise:

The mission of ACU is to educate students for Christian service and leadership throughout the world.
ACU promises to be a vibrant, innovative, Christ-centered community that engages students in authentic spiritual and intellectual growth, equipping them to make a real difference in the world.

Contribution of Course to Overall Business Perspective

This course continues the topic of developing digital entertainment in the fields of video/film, games and motion graphics. By offering an overview of the fundamental techniques of animation students will be able to broaden their understanding of motion and apply these principles to a vast variety of digital media fields.

Contribution of Course to the Development of Communication Skills:

This course is structured to develop both visual and oral communication skills. Assignments are designed to enhance student's creative understanding of the principles of animation. Group projects and student critiques will be organized to simulate professional working practices that are standard in digital media industries.

Contribution of Course to Christian Service and Leadership

In this rapidly expanding culture of digital entertainment there are nearly infinite ways to creatively express and share our Christian faith with the world whether professionally or personally. This class is designed to better equip students with tools and skill sets needed to create richer more dynamic media content that will broaden the effective quality of their artistic endeavors. We will also learn how individuals leading Christ-centered lives can effectively use their talents and faith to be shining examples in this secular media

industry.

"You are the light of the world. A town built on a hill cannot be hidden." Matthew 5:14

Goals for Student Competency
Just as you need to have a firm foundation when building a house, the main goal of *Keyframes and Pixels* is to provide a strong basis for students to expand their understanding and practice of animation. Students will learn how to navigate and use Autodesk Maya software to create independent class projects. They will develop the necessary skills in which to approach animation theoretically as well as technically.
They will also learn:

- The 12 key principles of animation, as outlined by Disney's famous 9 Old Men and Animation Director Richard Williams
- A brief history of animation and visual effects and profiles of key animators throughout history and why their contributions are important to the industry
- Demonstrate foundational knowledge of body mechanics through assignments that feature the basics of human motion
- Demonstrate understanding of an animated walk cycle

Format
Course material will be delivered primarily online with 5 on campus standard lecture presentations on dates that will be provided. Class material will consist of computer demonstrations, handouts, combined with group participation projects, self-study exercises, videos, homework assignments and informal review sessions.

Course Requirements
Students will be required to complete and turn in homework assignments, complete class quizzes, participate in possible group projects and sketchbook assignments. Any obviously recognizable or admitted attempt to use a maximum strategy in regards to course work will not result in an 'A.' University is not a zero-sum game. Meeting minimum requirements earns an 85%. Anything extra begins to tally on the additional points.

Course Web Site
Class assignments, videos, handouts and other instructions will be on Canvas. My contact information will also be there.

Class Tour of Reel FX Creative Studios
On Saturday April 2nd I will be taking the class on a tour of Reel FX Creative Studios located in Dallas, TX where I work as a Character Animator. Students will get a behind the scenes look at the inner workings of a feature film and commercial studio. We will also have an abbreviated class in the cafeteria. Students will be expected to drive or carpool from ACU to Reel FX Studio. Directions will be provided. http://www.reelfx.com/

Homework Assignments
The structure of this course dictates that we will immediately begin with homework assignments the first day of class in order to utilize our time efficiently. Weekly projects will be assigned on Saturdays and homework projects will be due at midnight on Fridays. We will have a group critique on days that class is held on campus. Each assignment will be graded. Assignments are expected to be turned in on time, any late assignments will be scored at **half credit**.

Final Project
Your final project will be the culmination of all you have learned over the past semester and should reflect that knowledge. It will be assigned on April 16th and you will be given three weeks to complete and finalize the project. You will then send the file to me via email. The due date is Friday May 6th by 12pm. I will respond with your final project grade and a written critique.

Class Participation
Just like in any professional setting, you must be prepared to participate in group activities and contribute to class discussions. You must be willing to give your honest and educated opinion, while being

considerate and conscientious towards others. I am conducting this class as if it is a professional working environment so I expect your full attention. Distractions like cellphones/iphones/ ipads/kindles/etc during the lecture or group discussion time will not be tolerated. I will require your complete participation 100% of the time out of respect to your fellow students and myself. I encourage questions and comments that are relevant to our topics of conversation and I am happy to facilitate a dialogue that is informative and insightful.

There will be a class participation grade based on your contributions to discussions and critiques. Each student is expected to respond and contribute appropriately.

Grade Composition

Your grade will be computed on the following basis (TENTATIVE):

Activity	Value	Completion or Due Date
Homework Assignments	500 (50%)	As assigned
2 Quizzes	200 (10%)	
Final Project	200 (20%)	Friday, May 6th by 12:00 noon
Class Participation	100 (20%)	

Grading System

Each activity (homework assignment, quiz, final exam) will be graded on the basis of 100%.
The grading system for the course is given in the following table.

Letter Grade	Semester Combined Average
A	90 or above
B	80 – 89.9
C	70 – 79.9
D	60 – 69.9
F	Below 60

Animation projects will be graded on a combination of the following; the amount of effort and time spent, application of learned material, and meeting all criterion of the assignment.

Attendance Policy

In business environments, employees who are often absent from, or tardy to, work do not enjoy long-term employment, regular pay increases, or good professional reputations. In this class you will be learning to solve problems similar to those you will encounter in professional settings, and the consistency with which you attend class reflects your commitment to the training necessary to pursue a business career. **Because the pace of this course is quite rapid, you cannot expect to do well if you frequently miss class.** You will be dropped from the course if you miss 20% of the class meetings, and you will be assigned a grade of WF. For M/W/F classes, this translates into 9 absences. This class will have 5 on campus sessions (Jan 16th, Feb 6th, Mar 5th, Apr 2nd and Apr 30th) and it is very important to attend these class meetings. You are late to class if you arrive five minutes after the scheduled start time. Every three late arrivals will be counted as one absence. You will be asked to initial an attendance roster for the class as well as the lab. If you fail to sign the roster, you will be counted absent even if you are in attendance. **It is <u>your</u> responsibility to sign the roll.**

If you plan to miss class to participate in a University-sponsored activity, you must provide your instructor a written notice signed by your sponsor seven (7) days in advance. These are approved absences that are not counted towards your absence accumulation. Absences due to illness with a doctor's signed excuse will also not be counted.

In any case, you will still be responsible for all notes and information missed as the result of your absence. Your instructor will not hand out course materials more than once, so you should plan to obtain them elsewhere. As noted above, homework assignments, as well as many of the class notes, will be available via the Internet.

Academic Integrity

Students are expected to abide by the University's policies and principles of academic integrity as outlined at www.acu.edu/campusoffices/campuslife/acad_integrity.html and the College of Business Honor Code as outlined at www.acu.edu/academics/coba/cobahonorcode.html. Students who cheat on exams, class assignments, or lab assignments can expect to be harshly penalized. Cheating includes, but is not limited to, copying answers on exams, plagiarism, inappropriate or fraudulent citation of the work of others, "borrowing" other students data/information and submitting/representing it as your own, unauthorized copying of computer files, unauthorized use of electronic media to transmit information and communicate with other students at test time (email, instant messaging, use of chat rooms, etc.), or supplying your own written documents or electronic files for others to use. At a minimum, students who cheat will receive no credit (a score of zero) on the assignment in question; and students may also be dismissed from the course and assigned a semester grade of F. Repeat offenders will automatically fail the course. Note that all duplicate work submitted by students will be assigned a grade of zero regardless of the source, and that substantially identical work will receive increased scrutiny. In addition, any confirmed or suspected evidence of cheating will be referred to the Dean of the student's college and the Dean of Student Life for further action. To promote academic integrity, all students are strongly encouraged to familiarize themselves with the policies noted above, and to read the article "Integrity: Academic and Political—A Letter to My Students," by Bill Taylor, a copy of which can be found on the course web site (Canvas) and in the course *classinfo* folder.

Classroom Management

In order to maintain decorum and to optimize the learning environment for all members of the class, certain classroom management policies must be adhered to:

- If you sleep in class/lab you will be asked to leave and you will be counted absent.
- If you walk out of class/lab without returning, you will be counted absent (obviously, exceptions will be made if you become ill or have made a prior arrangement with the instructor).
- Disruptive behavior will not be tolerated. This includes playing games, writing email, engaging in instant messaging, or similar activities on the computer terminal during lab periods. If you disrupt the class, you will be asked to leave and will be counted absent.
- Do not eat large meals during class time. Food can be extremely distracting to others especially if it is a big meal or aromatic in nature. Bottled drinks with a lid are permitted, and any snacks must be discreet and not distracting.

Communications

If there is any pertinent information that was not given during class time it will be posted to Canvas, so please try to check this often. I will provide you with an email address with which to email me with any questions or emergency info.

Students with Disabilities

Abilene Christian University is committed to providing a learning atmosphere which reasonably accommodates qualified persons with disabilities. If you feel you have a disability which may impair your capacity to successfully complete this course, please contact the Director of Disability Services (674-2667) in Alpha Academic Services. Student Disability Services assists students with disabilities in obtaining appropriate academic accommodations.

Text and Supplements

The textbook required for this course is:
The Animator's Survival Kit by Richard Williams
The Illusion of Life by Frank Thomas & Ollie Johnston

3D Animation & Rigging Grading Rubric

Excellent 4 pts	Good 3 pts	Fair 2 pts	Poor 1 pts	No Effort 0 pts
Excellent	Good	Fair	Poor	No Effort
Anatomy reference for body volumes and muscle definition, clothing materials, and multiple images of character	multiple images of character from various perspectives including close-ups and detail studies	2-3 images of character	1 image of character	no images collected
Excellent	Good	Fair	Poor	No Effort
multiple sketches from various perspectives, containing detail, composition, and anatomical guidelines, rough layout	2-3 sketches laying out the general shapes , spinal position, and volume masses, and rough layout	1-2ough sketches describing the general shape and volume	one sketch done, lacking anatomy, volume, or detail	no sketches
Excellent	Good	Fair	Poor	No Effort
All objects are named with proper naming conventions, joints are given prefixes and suffixes, items are grouped in structured folders, no extraneous items and unused assets	objects are named and grouped in folders, unused items and assets are removed	objects are named and placed in structured folders	objects are named	no organization
Excellent	Good	Fair	Poor	No Effort
character is scaled to 1, all objects are reset to zero, history is deleted, character is centered at 0,0,0	character is scaled to 1 with history deleted, character is centered at 0,0,0	character is scaled to 1, character is centered at 0,0,0	character scaled to zero	no scaling or orientation addressed
Excellent	Good	Fair	Poor	No Effort
image plane used with proper uv layout, scaling and placed in a reference layer	image plane used with proper uv layout	image planes used	image plane in place, scale and center is off	no image planes
Excellent	Good	Fair	Poor	No Effort
built with quads, silhouette follows the image planes	character comprised of quads	character comprised of quads;	character comprised of quads	character built with ngons and tris
Excellent	Good	Fair	Poor	No Effort
edgeloops follow a pattern that coinsides with the anatomy and form of the object; wirespans adhere to rule for quads; edges echo the shape of the object with ease of spans, no extra and repetitive edgeloops	edgeloops follow a pattern that coinsides with the anatomy and form of the object; wirespans adhere to rule for quads; edges echo the shape of the object with ease of spans	edgeloops follow a pattern that coinsides with the anatomy and form of the object; wirespans adhere to rule for quads	edgeloops follow a pattern that coinsides with the anatomy and form of the object	no rhythm
Excellent	Good	Fair	Poor	No Effort
Demonstrates understanding of muscle formation, skeletal movement and landmarks, correction scale and proportion	Created general parts of the body with some muscle definition	Basic human shapes are recognizable, volumes and body masses are distinguishable	Struggles with the overall shape of human figure, lack of understanding of human proportions	No resemblance of the human or human-like figure
Excellent	Good	Fair	Poor	No Effort
texture map has detail with either artistic style or photo-realistic quality; texture maps add to overall design of model	texture maps have detail and add color value to model	texture maps have some detail and color value	texture maps lack color information and detail	no texture maps

Excellent	Good	Fair	Poor	No Effort	
normal maps add exceptional detail quality to model	normal maps add noticeable detail to model	normal map are on the model	normal maps are broken	no normal maps	
Excellent	Good	Fair	Poor	No Effort	
Demonstrates understanding of silhouette, artistic and aesthetic craftsmanship, excellent composition and use of negative space, strongly resembles the live model	silhouette, pose, basic shapes and some detail closely resembling the live model	looks similar to the live model,	Struggles with capturing the visual information and applying it to the clay media,	lacks effort in creating an artistic sculpture, does not resemble live mode, no recognizable, features, landmarks or details	
Excellent	Good	Fair	Poor	No Effort	
skeleton is created with joints located in proper positions; xyz orientations are correct; naming conventions are proper	skeleton is created with joints located in proper positions; xyz orientations are correct	skeleton is created and joints located in proper positions	skeleton in place, but struggles with location of joint positions	no skeleton	
Excellent	Good	Fair	Poor	No Effort	
character is skinned to joints; all vertices assigned to proper joint; deformations are correct, no roaming verts,	character is skinned to joints; no roaming verts	character is skinned to joints;	character is skinned to joints	no skinning	
Excellent	Good	Fair	Poor	No Effort	
			character posed with control rig	no pose	
Excellent	Good	Fair	Poor	No Effort	
			renders created	no lighting and rendering	