**GDES 5383**  
**Animation**  *3 credits*

Mondays & Wednesdays  
8:30-10:40am, 316 McNeal hall

Instructor:  
Sauman Chu, Ph.D.  
Associate Professor  
240H McNeal Hall  
612.624.9705 (Direct line)  
schu@umn.edu

Office Hours  
Wednesdays 10:40-11:40 and by appointment

Course Description  
This is an advanced computer design class which focuses on the integration of design knowledge with Macintosh computer applications. With the support of their understanding of design principles and strategies, students obtain experience using software to create 2D and 3D (limited) digital illustration and animations. Adobe After Effects and Flash, will be covered. Previous experience of using Illustrator for computer illustration is required. Course goals include: broadening students’ experience of the applications of interactive software; enhancing the integration of design knowledge with the use of the computer as a medium; and producing sophisticated and professional animation designs. A cooperative learning environment is encouraged.

Objectives  
Students will:

- apply fundamental two-dimensional design principles and strategies in various projects
- demonstrate knowledge of color theories and understand color in the computer system
- demonstrate drawing skills on the computer, as well as knowledge of constructing two-dimensional compositions
- learn advanced functions of software used for animation
- learn and expand technical knowledge of the computer
- explore and develop different illustration styles
- produce refined 2D animations for various audiences

Attendance  
Attendance is absolutely essential and entirely your responsibility as are the consequences of your actions. Attendance for every class and staying for the entire class is required. The student is required to be on time for each class and is expected to work in class for the entire class period. If students arrive 30 minutes or more after class starts, it counts as an absence. Students with more than three absences will receive a reduction of two letter grades from their earned grade (i.e. an A becomes a C) and five absences will receive a F as the final grade.

Learning Outcome  
Students will learn to identify, define, and solve problems through the various projects. For instance, students will learn how to use AfterEffects to create a video for a non-profit organization. Students need to identify and define the visual components and content for the video and be able to create the message that communicates to the target audience. Grading will be based on how successful student demonstrates his/her ability on concept development and problem solving.
University Grading Standards

A - achievement that is outstanding relative to the level necessary to meet course requirements.
B - achievement that is significantly above the level necessary to meet course requirements.
C - achievement that meets the course requirements in every respect.
D - achievement that is worthy of credit even though it fails to meet fully the course requirements.
S - achievement that is satisfactory, which is equivalent to a C- or better (achievement required for an S is at the discretion of the instructor but may be no lower than a C-).
F (or N) Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.
I (Incomplete) Assigned at the discretion of the instructor when, due to extraordinary circumstances, e.g., hospitalization, a student is prevented from completing the work of the course on time. Requires a written agreement between instructor and student.

Credits and Workload

For undergraduate courses, one credit is defined as equivalent to an average of three hours of learning effort per week (over a full-semester) necessary for an average student to achieve an average grade in the course. For example, a student taking a three credit course that meets for three hours a week should expect to spend an additional six hours a week on coursework outside the classroom.

Classroom Conduct

All activities in the University, including this course, are governed by the university of Minnesota Student Conduct Code. Students who engage in behavior that disrupts the learning environment for others may be subject to disciplinary action under the Code. In addition, students responsible for such behavior may be asked to cancel their registration (or have their registration canceled).

Scholastic Dishonesty and Student Conduct Code

Academic misconduct is defined as any act that violates the rights of another student with respect to academic work or involves misrepresentation of a student’s own work. Academic misconduct includes but is not limited to: cheating on assignments or examinations, plagiarizing pieces of work, depriving others of necessary coursework, and sabotaging other’s work. Discovery of academic misconduct is grounds for an “F” for the course.

Visit http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.pdf

Harassment

The University of Minnesota is committed to providing a safe climate for all students, faculty, and staff. All persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation. Reports of harassment are taken seriously, and there are individuals and offices available for help.

Sexual Harassment

This policy governs the commitment to the prevention and awareness of and response to sexual harassment at the University of Minnesota (University). Visit http://www1.umn.edu/regents/policies/humanresources/SexHarassment.pdf

Expectations of Students

• students are responsible for all class meetings and materials, including any information contained in the syllabus
• students are responsible for being on time and preparing for all class sessions
• students are responsible for meeting all course requirements, observing all deadlines, examination times, and other course procedures
• students are responsible for seeking help when needed
• students who need special accommodations are responsible for working with the instructor and the relevant University offices
• students may not make commercial use of their notes of lectures or University-provided materials without the express-written consent of the instructor
**Academic freedom and responsibility**

Academic freedom is the freedom, without institutional discipline or restraint, to discuss all relevant matters in the classroom, to explore all avenues of scholarship, research, and creative expression, and to speak or write on matters of public concern as well as on matters related to professional duties and the functioning of the University. Academic responsibility implies the faithful performance of professional duties and obligations, the recognition of the demands of the scholarly enterprise, and the candor to make it clear that when one is speaking on matters of public interest, one is not speaking for the institution. [http://www1.umn.edu/regents/policies/academic/Academic_Freedom.pdf](http://www1.umn.edu/regents/policies/academic/Academic_Freedom.pdf)

**Climate of inclusivity**

You are expected to be attentive during class, ask questions if you do not understand something, and to offer your opinion. You are also expected to listen respectfully to other students and to me when speaking. The University of Minnesota is committed to providing a safe climate for all students, faculty, and staff. All persons shall have equal access to its programs and facilities without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation. Racism, sexism, homophobia, classism, ageism and other forms of bigotry are inappropriate to express in this class. Reports of harassment are taken seriously, and there are individuals and offices available for help.

**Availability of Disability and Mental Health Services**

The University of Minnesota is committed to providing all students equal access to learning opportunities. Disability Services (DS) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations.

- Students who have, or think they may have, a disability (e.g. mental health, attentional, learning, vision, hearing, physical or systemic), are invited to contact DS to arrange a confidential discussion at 612-626-1333 (V/TTY) or ds@umn.edu.
- Students registered with DS, who have a letter requesting accommodations, are encouraged to contact the instructor early in the semester to discuss accommodations outlined in their letter.

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via www.mentalhealth.umn.edu or contact Counseling/Consulting Services at 612-624-3323.

**Academic Services**

If you would like additional help, please contact one of the offices listed below.

- Center for Writing 10 Nicholson Hall, Mpls 612-626-7579
- Student Academic Success Service 340 Appleby Hall, Mpls 612-624-3323
- 199 Coffey Hall, St. Paul 612-624-3323

**Use of Class Notes and Materials**

Visit [http://policy.umn.edu/Policies/Education/Education/CLASSNOTESTUDENTS.html](http://policy.umn.edu/Policies/Education/Education/CLASSNOTESTUDENTS.html)

**Personal Electronic Devices in Classroom**

Visit [http://policy.umn.edu/Policies/Education/Education/CLASSROOMPED.html](http://policy.umn.edu/Policies/Education/Education/CLASSROOMPED.html)

**Accepting and Returning Assignments**

You will turn in your assignments directly to me during class time. Assignments will be returned from me. Please don’t drop off any work at the DHA front desk.

**Makeup work for legitimate absences**

Please contact your instructor for meeting your course work requirement and alternative due dates. Visit [http://www.policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html](http://www.policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html)
Late Project Policy

The student is required to complete all class assignments, and present them on time. Projects, which are one class period late, will be marked down two letter grades. After that time projects will not be graded except for extraordinary circumstances. If you have a problem completing the work on schedule, please see your instructor about alternative means of meeting your course obligation. Should such arrangements be made, it does not release you from any of the assignments required by this course. You will be given as much class time as possible to work on your assignments with your instructor in class. Late work will not be accepted.

Extra credit options

There is no extra credit option for this class.

Release of Work Statement

Students understand that enrollment in this course grants consent for their work to be selected for inclusion in college or departmental publications (online or in print). Your instructor may select to use your work to represent her/his skills as an instructor in a teaching portfolio (online or in print).

Critiques

There will be regular critiques. You are required to attend whether or not your own work is ready for presentation. You are expected to critique your own work as well as the work of your peers. Critiques provide important ongoing feedback and support throughout the design process and help students refine their work and develop a constructive critical eye and increased vocabulary.

Incomplete

There are no incompletes given in this class except for situations of extreme medical emergencies. An official letter from a physician must be submitted before an incomplete can be considered. Incompletes must be made up within the following semester, otherwise, an ‘F’ will be given.

Course Evaluation

Students will be required to complete all class assignments. Design work will be evaluated on concept, idea development, research, design process, class participation, execution, and drawing skills. (See the attached date-specific course outline and schedule). Final course grades will be distributed on a point/percentage system:

- Five Short Flash animations 50 points
- Flash: Animation design/visual interpretation 100 points
- Five Short After Effects animations 50 points
- After Effects: Animation design/product promotion 100 points
- After Effects: Video and animation 100 points

Grading: Out of the 400 possible points

94%/375 points and above = A
90%/360 points and above = A-
85%/340 points and above = B+
80%/320 points and above = B
77%/308 points and above = B-
73%/292 points and above = C+
70%/280 points and above = C
67%/268 points and above = C-
63%/252 points and above = D+
60%/240 points and above = D
Below 240 points = F

* Please note: All assignments must be turned in to receive a final grade. One missing assignment will automatically result in an “F” as the final course grade.

Course Text

No textbook is required.
Course Outline

This course outline is tentative and subject to change depending on the progress of the class. Staying on track is essential to completing your projects. If your final projects are not completed as per final specifications, you will receive a lower grade.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>W 9.4</td>
<td>Introduction of course, go through syllabus. Discussion of assignment 1. Flash review.</td>
</tr>
<tr>
<td>2</td>
<td>M 9.9</td>
<td>Assignment 1: working session.</td>
</tr>
<tr>
<td>2</td>
<td>W 9.11</td>
<td>Assignment 1: working session. Individual critique</td>
</tr>
<tr>
<td>3</td>
<td>M 9.16</td>
<td>Assignment 1: working session. Discussion of assignment 2.</td>
</tr>
<tr>
<td>3</td>
<td>W 9.18</td>
<td>Assignment 1 due. Assignment 2 working session</td>
</tr>
<tr>
<td>4</td>
<td>M 9.23</td>
<td>Assignment 2: Rough stage storyboard due, critique. Final stage working session</td>
</tr>
<tr>
<td>4</td>
<td>W 9.25</td>
<td>Working session: Assignment 2 final stage.</td>
</tr>
<tr>
<td>5</td>
<td>M 9.30</td>
<td>Working session: Assignment 2 final stage.</td>
</tr>
<tr>
<td>5</td>
<td>W 10.2</td>
<td>Working session: Assignment 2 final stage. In process critique.</td>
</tr>
<tr>
<td>6</td>
<td>M 10.7</td>
<td>Working session: Assignment 2 final stage.</td>
</tr>
<tr>
<td>6</td>
<td>W 10.9</td>
<td>Working session: Assignment 2 final stage. In process critique.</td>
</tr>
<tr>
<td>7</td>
<td>M 10.14</td>
<td>After Effects demonstration. Discussion of assignment 3</td>
</tr>
<tr>
<td>7</td>
<td>W 10.16</td>
<td>Working session: Assignment 3.</td>
</tr>
<tr>
<td>8</td>
<td>M 10.21</td>
<td>Assignment 2 due. Working session: Assignment 3. Individual critique</td>
</tr>
<tr>
<td>8</td>
<td>W 10.23</td>
<td>Working session: Assignment 3. Discussion of assignment 4</td>
</tr>
<tr>
<td>9</td>
<td>M 10.28</td>
<td>Assignment 4 rough stage working session</td>
</tr>
<tr>
<td>10</td>
<td>M 11.4</td>
<td>Assignment 3 due. Working session: Assignment 4 final stage.</td>
</tr>
<tr>
<td>10</td>
<td>W 11.6</td>
<td>Working session: Assignment 4 final stage.</td>
</tr>
<tr>
<td>11</td>
<td>M 11.11</td>
<td>Working session: Assignment 4 final stage. Discussion of assignment 5.</td>
</tr>
<tr>
<td>12</td>
<td>M 11.18</td>
<td>Working session: Assignment 4 final stage.</td>
</tr>
<tr>
<td>12</td>
<td>W 11.20</td>
<td>Working session: Assignment 4 final stage. In process critique.</td>
</tr>
<tr>
<td>13</td>
<td>M 11.25</td>
<td>Assignment 5 rough stage due. Critique. Working session: Assignment 5 final stage</td>
</tr>
<tr>
<td>13</td>
<td>W 11.27</td>
<td>Working session: Assignment 5 final stage. In process critique.</td>
</tr>
<tr>
<td>14</td>
<td>M 12.2</td>
<td>Assignment 4 due. Working session: Assignment 5 final stage</td>
</tr>
<tr>
<td>14</td>
<td>W 12.4</td>
<td>In process critique assignment 5. Working session: Assignment 5 final stage</td>
</tr>
<tr>
<td>15</td>
<td>M 12.9</td>
<td>Sue will be on 2 weeks Jury duty beginning 12/9 Working session: Assignment 5 final stage</td>
</tr>
<tr>
<td>15</td>
<td>W 12.11</td>
<td>Project 5 due.</td>
</tr>
</tbody>
</table>

Final Exam

There is no final exam for this class. Last day of the class is 12.4. Last project is due on 12.11.
Assignment One: Flash animations

Create 5 short timeline-based/ actionscript-based animations in Flash. Assuming each animation is designed for a particular website with specific audience in mind. For instance, a website for tennis events, a fashion magazine, an electronic product...etc.

Limitations
Images can be done in Illustrator, Photoshop, or you can choose found images and combine it with your illustrations. You need to determine the size of each animation. Sound effect is required for each animation. A description is required for the purpose of each animation (just 1-2 sentences).

Design Process
There won't be formal critiques for this project. However, for the beginning of each working session, you will need to spend 20 minutes to look at your classmates' work (not necessary every one's work on the same day). You can offer suggestions as you like.

All five animations are due on 9.18.

Ten points for each animation based on the following criteria:

(2) Design Concept
(2) Technical Skill/illustration skill
(2) Creative/Design Process
(2) Animation Competency
(2) Solution to the problem
Assignment Two: Flash Animation

Create an animated story book by choosing a short story and designing the illustration and animation.

**Limitations**

Drawings can be done in Flash, Illustrator, or Photoshop. Scanning pictures is not allowed. No limitations are set concerning choice of color. Size of the frame is 480 pixels X 640 pixels or smaller. The animation needs to demonstrate continuous actions or movements. A background is required and has to be included for each frame, you can apply the same background for each frame. Sound/music must be included. You can also narrate the story.

**Design Process**

**Rough Stage:** Select two stories and create two rough story boards (8-10 frames) in illustrator (to show the series of illustrations. Place the illustrations in Flash, allocate appropriate time for each illustration so that we have enough time to view each part of the story. Due 9.23.

**Final stage:** The best design solution is selected from the rough stage drawings. The animation must then be redefined and finalized in full size and color. Due. 10.21.

**Grading Criteria:**

(20) Design Concept
(20) Drawing Skill
(15) Creative/Design Process
(25) Animation Competency
(20) Solution to the problem
Assignment Three: After Effects animations

Create 5 short animations in After Effects. Similar to assignment one, assuming each animation is designed for specific audience in mind. For instance, a toy product for a TV commercial or a website.

Limitations Images can be done in Illustrator, Photoshop or you can choose found images and combine it with your illustrations. You need to determine the size of each animation. Sound effect is required for each animation. A description is required for the purpose of each animation (just 1-2 sentences).

Design Process There won't be formal critiques for this project. However, for the beginning of each working session, you will need to spend 20 minutes to look at your classmates' work (not necessary every one's work on the same day). You can offer suggestions as you like.

All ten animations are due on 11.4.

Ten points for each animation based on the following criteria:

(2) Design Concept
(2) Technical Skill/illustration skill
(2) Creative/Design Process
(2) Animation Competency
(2) Solution to the problem
Assignment Four: Video and Animation

Design and create a promotional video for the Taking Steps Together program at the Hennepin County Medical center. This will be a GROUP project. You will be arranged into a group of three to work on the video together. Adding animation to the video is required. More information will follow.

Limitations
Your project must include a video and the video should be directed/created/edited by your group. Place the video in the movie and add animation. Content of animation should match the objective of the video. Script of written content will be provided by the client. Participants (actors and actress) in the video will also be arranged by the client.

Design Process

Rough Stage: Create two different story boards to show the series of animation/video (just outline). All ideas must be drawn in Photoshop or Illustrator and placed in After Effects in order to show the animation. Again, there is no need to get into detailed, sketches of idea is enough. Due 10.30.

Final stage: The one best design solution is selected from the rough stage ideas. The video/animation will then be redefined and finalized in full size and color. Due 12.2.

Grading Criteria:

(20) Design Concept
(30) Technical Skill/video
(10) Creative/Design Process
(20) Animation Competency
(20) Solution to the problem
Assignment Five: Promotion Design

Design a 20-second animation in After Effects that promotes one of the following products (if you have other idea, please discuss it with me):

- electronic items
- clothing products
- home items

Limitations
Images can be done in Illustrator, Photoshop or you can choose found images and combine it with your illustrations. Scanning pictures is allowed. The animation needs to demonstrate continuous actions or movements. Sound effect must also be included (a song or music).

Design Process

Rough Stage: Create two different story boards to show the series of animation (just outline). All ideas must be drawn in Photoshop or Illustrator and placed in After Effects in order to show the animation. Again, there is no need to get into detailed, sketches of idea is enough. Due 11.25.

Final stage: The one best design solution is selected from the rough stage ideas. The animation will then be redefined and finalized in full size and color. Due 12.11.

Grading Criteria:

(20) Design Concept
(15) Drawing/Technical Skill
(15) Creative/Design Process
(30) Animation Competency
(20) Solution to the problem