Course Syllabus

Course Information

ASTU 4045/ASTU 5045, 3 credits: Digital Fabrication for Art Majors (online)

Summer 2020: May 11 – August 8

Instructor Information

James Thurman, Associate Professor

Office: 309

Office hours: By Appointment

Email: james.thurman@unt.edu

Brief Instructor Bio

James Thurman is an Associate Professor at the University of North Texas’ College of Visual Arts & Design, where he is Program Coordinator and faculty member of the Metalsmithing & Jewelry area. He received his MFA in Metalsmithing from the Cranbrook Academy of Art and his BFA in Sculpture from Carnegie Mellon University. In 2010, he completed a four-year term on the Board of Directors of the Society of North American Goldsmiths. In 2012, he was a Fulbright Specialist Scholar, working with Kadir Has University in Istanbul, Turkey, on curricular development.

A prolific and highly active studio artist for more than twenty years, his work has been included in hundreds of national and international curated and juried exhibitions as well as ten solo exhibitions in the past ten years. In addition to the exhibition of his work, James regularly lectures and gives workshops about his work and the unique technical aspects of his studio production, including a laminated composite material he developed, “Thurmanite.” Recent engagements have included The Glass Furnace (Istanbul, Turkey), Penland School of Crafts, Arrowmont School of Arts and Crafts, the Museum of Fine Arts Houston Glassell School, Pittsburgh Center for the Arts, and the Yuma Symposium.

Course Prerequisites

Must be a major in the College of Visual Arts & Design or by permission of instructor.

Course Description

Digital fabrication (the use of computer-controlled machines to create physical objects) is now easily accessible to individuals and is a rapidly growing field with tremendous entrepreneurial opportunities.
Students in this course will be instructed on the basics of 2D and 3D object-making and participate in group analysis of completed objects.

This course will utilize the traditional methods of the project-based studio course and adapt them to the online learning environment. By thoroughly documenting each project and uploading those images, students can receive constructive criticism, both from the instructor as well as from their peer group.

In addition to the assigned projects, the instructor will post a weekly video update about the overall progress of the course and highlight the key points of the coming week. There will also be a Weekly Spotlight, which will be a concise article about a topic relevant to the course content.

**Course Objectives**

- **Goals/rationale of the course:**
  - Given the increasing availability and utilization of digital fabrication technologies, the content of this course will introduce and guide students in the appropriate choice of digital fabrication technologies as it applies to their specific discipline and potential career path.
  - The benefits of experiential learning found within traditional studio courses will be maintained through individual hands-on experimentation and refinement supplemented by asynchronous instructor and peer feedback.
  - The sequence of assignments in the course will increase in complexity and challenge, building upon previously explored approaches and technologies. Subject matter from weekly updates will inform and reinforce contemporary approaches and applications of the tools and technologies.

- **Learning Outcomes:**
  - The learner will apply relevant aspects of software in the digital fabrication of physical objects and combine those products with hand-assisted studio fabrication techniques.
  - The learner will demonstrate an awareness of relevant contemporary work through their completed objects and writings.
  - The learner will be an active and engaged participant in discussion forums within his/her learning community by analyzing and evaluating peer projects.

**Course Requirements**

- Students will regularly access and follow all course instructions in the content area.
- Students will review the weekly instructor video update and Weekly Spotlight article.
- Students will complete and submit all assignments according to the deadlines listed in the Course Calendar.
- For every completed Assignment, students will provide feedback to at least three classmates on each students’ course Discussion.

**Course Communication**

- All communication relevant to the course will be done using Messages within the course on Canvas.
The instructor will respond as soon as possible, typically within within 2 business days (M-F) after receipt of Message based on the local time of the instructor (which might be significantly different based on international travel).

Assessment & Grading

This course is made up of a series of assignments and assessments to assist you in achieving the course learning objectives/outcomes. Each week you will work on various combinations of assignments, activities, discussions, readings, research, etc. which are to be completed according to the Course Calendar.

- Personal Profile: 50 points
  - This is your first entry on your course Discussion as per Assignment.

- Projects: 850 points
  - The guidelines and expectations for each project are listed on each Assignment. In addition to the actual completed project, your feedback on your peers’ projects will also be evaluated. The instructor will complete online evaluation rubrics which will post to each student’s gradebook.

- Project Evaluation Rubrics
  - Every project has a certain total point value assigned to it, which is distributed among the following key components. Not all projects will require all components. In order to keep in sync with the rest of the students in the course, late work will be severely penalized.
  - Ideation: Ideation is the process of creating numerous possible directions/designs for a project. Not all projects will require ideation. For projects that do require ideation, the project assignment will indicate the specific type and amount of ideation that is expected.
  - Research & Context: This part of the assignment refers to any amount of background or inspirational information that would be required to be done. Not all projects will require research. For projects that do require research, the project assignment will indicate the specific type and amount of ideation that is expected.
  - Craftsmanship: In basic terms, good craftsmanship is defined as clearly intentional control of the processes used in the creation of a project. This can be applied to both digital and physical processes. Specific instructions are excellent guidelines as to what is expected. Following guidelines will result in better craftsmanship. Digitally, this would mean that there is no extraneous information in the file beyond what is needed and the file is formatted properly. Physically, this would mean that the object is well-made, clean, and as precise as possible. Every creative process has its “happy accidents” but they must be well-integrated into final product. Grading on craftsmanship will also take into consideration how ambitious the particular design is along with how well it was completed. The complexity and difficulty of particular approaches are also influential factors.
  - Formal Qualities: This part of the evaluation of the project relates to how successfully integrated are the aesthetic/design elements of the project and how refined is it. This aspect of the project can also relate to how original and contemporary the particular design solution is. It is important to be aware of historic and current styles and approaches and to consider how your work
advances the dialogue. Little is to be learned from simple imitation. Creativity and originality is expected and will obviously yield the most successful results.

- **Documentation**: Given that the only means of evaluation of completed projects is through the posted images, it is essential that the Image Documentation guidelines be followed precisely. This is not only critical for this course but is excellent practice in improving skills in the documentation of your completed works for the future. Of course, it is not expected that anyone have quality the level of a professional product photographer but having a basic level of object documentation skills is a must. Each project will specify the number and type of images to be posted.
  - **Participation**: This is the evaluation on the quality and quantity of feedback provided to your classmates. Providing too much or too little feedback is equally problematic. Although peer feedback is a wonderful component of this course, the emphasis is on the completion of physical projects and spending too much time on the feedback portion (either in the posting of it or in the review of feedback received) can be detrimental to the quality of the completed projects. Refer to the feedback guidelines and the project assignments for particular points or questions to address for each project. In addition to the quantity of feedback, the quality of the comments are also considered. Feedback should be as useful and insightful as possible and being specific is very helpful in doing so. Everyone is expected to be professional but a lack of critical feedback wastes everyone’s time. Addressing the less successful elements of a completed project is equally important as highlighting the more positive aspects.

- **Weekly Spotlight Assignment**: 100 points
  - Students will be assigned different deadlines for the completion of their Weekly Spotlight article, which will be submitted using the Turnitin assignment tool.

- **Grading**
  - Grades for the course are based on un-weighted points from each completed assignment’s rubric
    - 900-1000 = A
    - 800-899 = B
    - 700-799 = C
    - 600-699 = D
    - 0-599 = F

### Course Evaluation

- All students will have the opportunity to complete the SPOT (Student Perceptions of Teaching) through their individual myUNT account.

### Scholarly Expectations

- All works submitted for credit must be original works created by the student uniquely for the class. It is considered inappropriate and unethical, particularly at the graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the
instructor. Work submitted at the graduate level is expected to demonstrate higher-order thinking skills and be of significantly higher quality than work produced at the undergraduate level.

- **Time Management:** There are frequent deadlines for this course to assist in the even pacing of the workload. However, given the independent and individualized nature of an online course, managing your own time becomes ESSENTIAL! Internet availability and quality of connection is different for everyone but a requirement for this course. Having difficulty getting online is not an acceptable excuse for not submitting work on time. It is STRONGLY encouraged that you do not wait until the last minute to post required images or feedback. Incomplete work will be graded “as is.” It is the responsibility of the student to be sure that parts of assignments completed by service providers (online or locally) are received with sufficient time to complete the assignment and post required images.

- **Metacognition:** This can be defined as learning about how you learn. Given the online and intrinsically independent nature of this course, it is imperative that you know how you learn best. This relates to what environment you create to work in, when you work, and how you solve any problems you encounter. It is expected that if there is anything that you do not understand (a process, an assignment, or even a particular term), it is your own responsibility to make your best effort to independently overcome that obstacle. If after you have exhausted your own abilities to solve the problem, you can then consult with your peers or instructor.

## Course Summary:

<table>
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<tr>
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<tr>
<td>Sun May 17, 2020</td>
<td>[Syllabus Acknowledgement &quot;Quiz&quot;] (<a href="https://unt.instructure.com/courses/31707/assignments/584026">https://unt.instructure.com/courses/31707/assignments/584026</a>) due by 11:59pm</td>
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| Sun May 31, 2020  | Assignment 2 Feedback  
(https://unt.instructure.com/courses/31707/assignments/584030)  
(due by 11:59pm) |
|                   | Assignment 3A (mat board prototype)  
(https://unt.instructure.com/courses/31707/assignments/584033)  
(due by 11:59pm) |
|                   | Weekly Spotlight Assignment  
(https://unt.instructure.com/courses/31707/assignments/584049)  
(3 students) |
| Sun Jun 7, 2020   | Assignment 3A Feedback  
(https://unt.instructure.com/courses/31707/assignments/584032)  
(due by 11:59pm) |
|                   | Assignment 3B (revised digital file)  
(https://unt.instructure.com/courses/31707/assignments/584034)  
(due by 11:59pm) |
|                   | Weekly Spotlight Assignment  
(https://unt.instructure.com/courses/31707/assignments/584049)  
(4 students) |
| Sun Jun 14, 2020  | Assignment 4A (3 completed tutorials)  
(https://unt.instructure.com/courses/31707/assignments/584037)  
(due by 11:59pm) |
|                   | Weekly Spotlight Assignment  
(https://unt.instructure.com/courses/31707/assignments/584049)  
(5 students) |
| Sun Jun 21, 2020  | Assignment 4B (3 potential designs)  
(https://unt.instructure.com/courses/31707/assignments/584038)  
(due by 11:59pm) |
|                   | Weekly Spotlight Assignment  
(https://unt.instructure.com/courses/31707/assignments/584049)  
(5 students) |
| Sun Jun 28, 2020  | Assignment 4B Feedback  
(https://unt.instructure.com/courses/31707/assignments/584039)  
(due by 11:59pm) |
|                   | Assignment 4C (refine to single model)  
(https://unt.instructure.com/courses/31707/assignments/584041)  
(due by 11:59pm) |
|                   | Weekly Spotlight Assignment  
(https://unt.instructure.com/courses/31707/assignments/584049)  
(5 students) |
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