

TCORE 112

Winter 2020

MW 9:30-10:50am TPS 301
Lecturer: Ruth Vanderpool
Office Hours: MW 11:00-noon
@ TLC Snoqualmie 2nd floor

SLN 20743
Office: MDS 303C
Phone: 253-692-4310

e-mail: rvanderp@u.washington.edu
<http://faculty.washington.edu/rvanderp/>

Course Description: Origami is an art (and mathematics!) that begins with just paper but produces some staggeringly beautiful and interesting forms. This course uses Origami to introduce students to geometric and scientific thinking, artistic and creative problem solving in restrictive settings, and the history of math & sciences.

Generally, the Core program consists of a coordinated series of courses that represent the various disciplines in the university. This course fulfills one of the university's general education requirements in each of the areas of knowledge. The core courses are designed to both support and challenge you to develop the critical thinking, writing, research, and analytical skills you'll need at UWT while introducing you to relevant topics in the social sciences, humanities, and sciences.

Student Learning Objectives: Students will be able to:

1. define origami & provide some history of its development.
2. solve open-ended geometric problems involving lines, triangles, and circles.
3. express geometric ideas to others through precise writing or speech.

More generally, by the end of this course students will have the skills to:

1. express ideas clearly in writing and speaking in order to synthesize and evaluate information.
2. identify, analyze, and summarize/represent the key elements of a text.
3. self-assess personal strengths and how they help overcome weaknesses.
4. approach a complex issue by breaking it down into manageable pieces.
5. make connections among assignments and readings to develop a sense of the "big picture".
6. collect, evaluate, and analyze information to solve problems or answer questions.

Useful Items:

- Lang, Robert. *Origami Design Secrets: Mathematical Methods for an Ancient Art* 2nd Ed. ISBN: 978-1-56-881436-0
- Wheeler, Carolyn. *Practice Makes Perfect Geometry* ISBN: 978-0-07-163814-2

Important Dates:

2/7	Midterm	1/01	Last day alter your schedule with no fees
3/18	Final (8:00-10:05am)	2/23	Last day to change grading option

Homework Policy: Homework will be assigned everyday and collected regularly. Ten minutes will be set aside at the start of every class to address homework questions. Assignments are due by the start of class the day they are due. Once I have started marking an assignment, I no longer accept late work.

The homework will be largely comprised of activity write-ups and origami work. Given the Student Learning Objectives described above, your work will be largely graded by the *process, explanation*, in addition to the *correctness*. Because of this, you will have to spend more time on your homework than you would on a more traditional, computation-based math course.

Quizzes: A quiz is given every week at the instructor’s discretion. Generally you will be given 30 minutes following the homework question period at the *start* of class every Friday. The quizzes will focus on the material covered in the previous week. Notes will be aloud although limited and dependent on the quiz. No make up quizzes, unless previously arranged, will be given, but I will drop the lowest scoring quiz so that you have some flexibility.

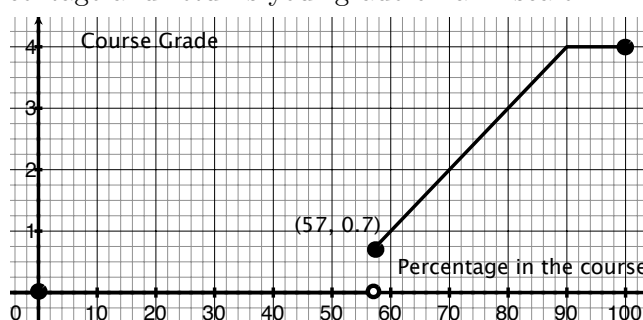
Project: One group origami project completed in pairs or groups of three. The project consists of a presentation and paper focused on an origami design of your choosing. The detailed instructions will be handed out soon but you may want to start searching for a pattern that you find enjoyable and can teach others.

An optional project will be introduced after the midterm. The optional project has the same structure of a paper and presentation and can be done in it’s entirety or in sections if anyone wishes to improve their marks from the first origami project described above.

Journals: Journal prompts will be posted on Canvas and are due a half hour before the next class meeting. These prompts are to get you to think about assigned materials and prepare you for class. They are marked only for completion.

Grades: The following weights will be used to calculate your percentage in the course. The function graphed takes your course percentage and returns your grade on a 4. scale.

Journal	10%
Homework	20%
Quizzes	15%
Project	20%
Scaffolding	10%
Midterm	10%
Final	15%



Outside Resources:

Come visit me in the TLC (Snoqualmie 260) for Drop-In hours! If you are unable to make these, please let me know and I will try to work with your schedule. Also remember that you are not alone in this class and your peers are a valuable (and often underutilized) resource.

Visit the Teaching & Learning Center (TLC)! Math tutors are available Monday through Thursday from 9am-7pm and Fridays from 9am-3pm. Complete information is available at <http://www.tacoma.uw.edu/teaching-learning-center/teaching-learning-center>.

Notes: There is *so* many things to say here!!! A complete list is posted at <https://www.tacoma.uw.edu/faculty-assembly/syllabi-service-statements> but a few are highlighted below.

- I do *not* check my email or extension requests after 4pm. Communication sent after 4pm may not receive a response until the next morning. The University's e-mail policy is above.
- While I have attempted to make this syllabus as complete as possible, adjustments will be made throughout the course. Announcements will be made during class and it is the responsibility of the student to keep updated if class is missed.
- Bias Reporting: Report an incident of bias or explore how to effectively respond by visiting <http://www.tacoma.uw.edu/reportbias>.
- UW Tacoma is committed to making physical facilities and instructional programs accessible to students with disabilities. Disability Resources for Students (DRS), located in MAT 354, functions as the focal point for coordination for students with disabilities. If you have a physical, emotional, or mental disability that "substantially limits one or more major life activities [including walking, seeing, hearing, speaking, breathing, learning and working]," and require accommodation in this class, please contact DRS at (253)692-4508, email at drsugt@uw.edu or visit <http://www.tacoma.uw.edu/drsugt>.
- The Counseling Center offers short-term, problem-focused counseling to UW Tacoma students who may feel overwhelmed by the responsibilities of college, work, family, and relationships. Counselors are available to help students cope with stresses and personal issues that may interfere with their ability to perform in school. The service is provided confidentially and without additional charge to currently enrolled students. To schedule an appointment, call 253-692-4522 or stop by the Student Counseling Center (SCC), located in MAT 354.
- Campus Safety Information: <http://www.tacoma.uw.edu/campus-safety/home>. Safety escorts are available 24 hours a day, 7 days a week, there is no time limit. Call the main office line at 253-692-4416.
- Inclement Weather: Always check the UW Tacoma Home Page: official campus closures or delays will be announced there first. Course Announcements and Email regarding assignments and expectations during a closure will follow.
- Infants/Children in Class Policy: If you have no choice but to bring a child or children with you to class, please let me know prior to class. You will be responsible for seeing that the child or children are not disruptive to the class. If you are breastfeeding an infant or expressing milk regularly, you may bring an infant or breast pump to class. If you prefer to breastfeed or breast pump outside of class, you may take time out of class to use the lactation room (GWP 410).
- To plagiarize is to use the ideas-or unique phrasings-without acknowledging that they come from someplace other than you. At the UW Tacoma, plagiarism is a violation of the student conduct code and the consequences are serious. If you have questions about what amounts to plagiarism, seek guidance from faculty and the TLC.
- Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Faculty Syllabus Guidelines and Resources. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form available at <https://registrar.washington.edu/students/religious-accommodations-request/>.