



P3 Applied: Additive Manufacturing (AMSI)

Application of Transdisciplinary Problem- Based Learning (TPBL)

May 2018

Dates: May 7- May 25, 2018

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Overview: *P3 Applied* is an online course paced over three weeks that focuses on design-thinking, team collaboration, and effective communication – all key components for a successful STEM program. Taking theory to practice, *P3 Applied: Additive Manufacturing*, helps you build and deliver a program that engages students in innovation and strengthens community, business and industry partnerships.

Course Format: We will use Basecamp™ as our online platform. An invitation to join Basecamp™ will be emailed to you. Each weekly module includes the following: 1) watch podcasts, 2) complete extension activities which will include viewing videos and answering 2-3 discussion questions, 3) complete the corresponding deliverables, and 4) participate in a live weekly virtual discussion.

Schedule: Links to the podcasts and extension activities and directions for the deliverables will be posted on Basecamp™ beginning **May 7, 2018**. You will have one week to complete all course content. There will be 3 live virtual meetings. During the weekly virtual discussions, each participant will present their work.

Virtual Weekly Brainstorm Login via Zoom™

Section 1

Dates: Thursdays: 5/10, 5/17, & 5/24

Time: 4:00-5:00 PM ET

Link: <https://zoom.us/j/193590216>

Join by phone: +1 669 900 6833 or +1 646 558 8656

Meeting ID: 193 590 216



Course Podcast Topics



APPLIED ADDITIVE MANUFACTURING



Online Podcast



Extension Activity



TPBL Deliverables



Virtual Live Meeting

Each Week



Change the Application

Problem Articulation

Team Collaboration



The Design Cycle in Action

Project Management



Documentation of Innovation



Course Schedule

Week	To-Do	Extension Activity	Deliverables
1 (5/7-5/14)	Participate in Virtual Meeting Watch Wk 1 Podcasts (see pg. 2) Complete Week 1 Extension Activity Complete Deliverables	CAD-Fusion 360: 1. Install software 2. Watch Fusion 360 tutorial. Answer the discussion questions on Basecamp.	Collaborative Team Norms: communication, documentation, timelines, habitats of mind (Upload to your folder in Basecamp)
2 (5/14-5/21)	Participate in Virtual Meeting: <i>Present Collaborative Team Norms</i> Watch Wk 2 Podcasts (see pg. 2) Complete Week 2 Extension Activity Complete Deliverables	1. Watch Design Cycle and Additive Manufacturing Videos and answer the discussion questions on Basecamp.	CAD- prototype of individual puzzle piece (Upload to your folder in Basecamp)
3 (5/21-5/28)	Participate in Virtual Meeting: <i>Present Prototype of individual puzzle piece</i> Watch Wk 3 Podcasts (see pg. 2) Complete Week 3 Extension Activity Complete Deliverables	1. Future of Additive Manufacturing Videos and answer the discussion questions on Basecamp. 2. Review information to prepare for Additive Manufacturing Fundamentals Exam	PowerPoint explaining each Additive process (collaborative work in your team) (Upload to your folder in Basecamp)
4 (5/28-6/1)	Upload PowerPoint explaining each Additive process Review to ensure all course material is complete		(ALL Extension Activities and Deliverables Completed and Uploaded to Basecamp™ by June 1, 2018)