South Dakota School of Mines & Technology

Manufacturing Lab Use

- Manufacturing labs include:
 - o 204 wood shop
 - o 214 machine shop
 - o 215, The Zoo, specifically CNC plasma, welding, anodization
 - o 234, The Aquarium, specifically 3D print
- Every project (student build or requested build) <u>must</u> include a drawing of each part to be built and an assembly drawing, if applicable.
- Drawings must be completed in Autodesk Inventor, Solid-Works, or equivalent.
- Parts to be CNC require model-based file:
 - o 3D print parts require an STL file
 - CNC plasma parts require a DXF file
 - o CNC machined or turned parts require a STP file
 - o Alternatively, students may develop a file in Cam software
- Software: CM 268 PCs will have installed and maintained design and cam software.
 Local installs of these applications are available.
- To initiate any project, first contact lab support staff (Dr. Lalley, Mr. Tseptsura, or one of the Manufacturing, 3D print, or Controls mentors).
- Material certifications must accompany any material brought into the building.