

**David Potchak – Tentative Presentation Outline
DEA Clandestine Laboratory Training Center**

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Section	Pages
Self and Project Introduction:	1
Presentation Overview:	1
General Building Information (use, size, location):	2
- Kind of work performed in labs	
- Physical and academic training	
Existing Mechanical Design:	4
- Central cooling and heating plants	
- 100% OA AHU serving labs	
- Economizer capable service to classrooms and offices	
- CO ₂ -based DCV	
Mechanical Redesign:	14
- Chilled water as preheat	
o Parallel vs. Series	
- Membrane heat exchanger for lab exhaust	
- Enthalpy wheel for classrooms and offices	
o Controls for enthalpy wheel and economizer mode	
- Energy and cost analysis of final design	
Electrical Breadth:	2
- Integration of new equipment	
Structural Breadth:	2
- Integration of new equipment	
Conclusions:	2
- Revisit energy and cost analysis of all design changes	
Acknowledgements:	1
Questions:	<u>1</u>
	30

