



Name of School: Missoula College

Name of Learning Resource Material: Energy Technology Program

Program Overview

Courses

- ETEC 105: DC Circuit Analysis
- ETEC 106: AC Circuit Analysis (no documents were shared)
- NRGY 191: Safety and Rigging
- BME 122: Electricity
- NRGY 235: Building Energy Efficiency
- NRGY 270: Recycling Technology

Name of Author(s): Wally Higgins, Shawna Page, William Hillman, Bradley Layton, Zandy Sievers, Lagan Todd

General formatting note: It is optional, but recommended that each document is consistently formatted.

- Most if not all of Missoula’s shared documents already include a header/footer with RevUp’s logo.
- However, I have provided an example template, which is titled, “List of OER Material: Missoula College_Energy Technology Program,” which can also be uploaded to Skills Commons as an OER materials map.

Document Nomenclature: It is optional, but recommended that each document within a program/curriculum been named similarly.

- Zipped material for a PROGRAM: RevUp_Missoula College_Program Name
- Zipped material for a COURSE: RevUp_Missoula College_Course Name
- Individual Course Material: Program Name abbreviated_Course Name_Course Item_Missoula College


Example: ETEC105_DC Circuit Analysis_Syllabus_Missoula College

ENERGY TECHNOLOGY Program	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
Energy Technology Program: Overview	Word	Looks good	Need to include	Looks fine	
ELECTRICIAN’S HELPER Certificate	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
Electrician’s Helper: Course	Word	Looks good	Need to	Looks fine	

Descriptions			include		
Electrician’s Helper: Course List Within a Program	Word	Looks good	Need to include	Looks fine	
ETEC 105: DC Circuit Analysis	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
ETEC 105: DC Circuit Analysis Syllabus Author: Wally Higgins	Word	Looks good	Need to include	Include Missoula College’s accessibility statement	
ETEC 105: Principles of Electric Circuits Textbook Chapters 1-8	PPT				NOTE: If these PPT slides are owned by Sage Publication (or the authors of the <i>Advertising and Promotion</i> textbook), then they cannot be uploaded to Skills Commons –it is considered third party copyrighted material.
ETEC 106: AC Circuit Analysis	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
ETEC 106: AC Circuit Analysis					NOTE: No documents were shared.
NRGY 191: Safety and Rigging	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
NRGY 191: Safety and Rigging Syllabus Author: Shawna Page	Word	Looks good	Need to include	Include Missoula College’s accessibility statement	
NRGY 191: Safety and Rigging Course Materials (Schedule)	Word	Looks good	Need to include	Looks fine	
NRGY 191: Course Lesson: Introduction to OSHA	PPT				NOTE: PPT slides have the OSHA logo on each one. If copyrighted by OSHA, these slides cannot be uploaded to Skills Commons –it is considered third party copyrighted material. Include a link in the syllabus under course materials.
NRGY 191: Course Lesson: Struck by Hazards	PPT	Need to include	Need to include	Alt Text needed for images	Accessibility Comments: PowerPoint document is only somewhat accessible. While a screen reader or other assistive device may be able to read some of the text in text boxes, all the images need Alt Text. Blind or visually



					impaired users would only glean a portion of the information shared in the presentation. PowerPoint Help can show you how to create invisible slide titles that can be useful for navigation for users who are unable to see the slides. Accessibility of PPT checklist: https://app.box.com/s/5x702tncq1klwxb52ap6up37fe4yms36
NRGY 191: Course Lesson: Electrical Safety in Construction	PPT				NOTE: PPT slides have the Intermountain Safety Training & Consulting logo on each one. If copyrighted, these slides cannot be uploaded to Skills Commons –it is considered third party copyrighted material. Include a link in the syllabus under course materials.
NRGY 191: Course Lesson: Personal Protective Equipment	PPT				NOTE: PPT slides have the Intermountain Safety Training & Consulting logo on each one. If copyrighted, these slides cannot be uploaded to Skills Commons –it is considered third party copyrighted material. Include a link in the syllabus under course materials.
NRGY 191: Course Lesson: Fall Protection	PPT				NOTE: PPT slides have the Intermountain Safety Training & Consulting logo on each one. If copyrighted, these slides cannot be uploaded to Skills Commons –it is considered third party copyrighted material. Include a link in the syllabus under course materials.
NRGY 191: Course Lesson: Scaffolding	PPT				NOTE: PPT slides have the Intermountain Safety Training & Consulting logo on each one. If copyrighted, these slides cannot be uploaded to Skills Commons –it is considered third party copyrighted material. Include a link in the syllabus under course materials.
NRGY 191: Course Lesson: Ladders	PPT				NOTE: PPT slides have the Intermountain Safety Training & Consulting logo on each one. If copyrighted, these slides cannot be uploaded to Skills Commons –it is considered third party copyrighted material. Include a link in the syllabus under course materials.

BME 122: Electricity	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
BME 122: Electricity Syllabus Author: Bill Hillman	Word	Looks good	Need to include	Include Missoula College's accessibility statement	
ENERGY AUDITOR Certificate	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
Energy Auditor: Course Descriptions	Word	Looks good	Need to include	Looks fine	
Energy Auditor: Course List Within a Program	Word	Looks good	Need to include	Looks fine	
NRGY 235: Building Energy Efficiency	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
NRGY 235: Course Materials (Schedule)	Word	Looks good	Need to include	Looks fine	
NRGY 235: Course Syllabus Author: Bradley Layton	Word	Looks good	Need to include	Alt Text needed for images Red text in Weekly Topic Outline may be problematic	<p>NOTE: The header lists 2 different syllabi titles: Building Energy Efficiency Syllabus and Recycling Technology Syllabus. <u>Be sure to correct.</u></p> <p>Accessibility Comments: ALT TEXT: To get a more detailed explanation about including Alt Text with images, you can run the Accessibility Checker in Word. Go to File, and you will see a box that says, "Check for Issues."</p> <div style="text-align: center;">  <p>Click on "Check Accessibility."</p> </div> <p>Red text may be problematic for some students. Consider text labels that identify text as "IMPORTANT," or "NOTE:" in</p>



					order to distinguish colored text in addition to just using the color.
NRGY 235: Course Materials & Learning Activities: Week 1					
NRGY 235: Course Lessons: Week 1: Lecture 1 Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Lessons: Week 1: Lecture 2 Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Lessons: Week 1: Lecture 2 Corrections Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility. Recommendation: Create an updated version of the Lecture 2 PPT to include all of the corrections, and only upload the corrected PPT to Skills Commons.
NRGY 235: Supplemental Material: Week 1: Field Data Collection Form	PDF				Recommendation: Building Science Tech logo included - third Party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials. Include a link in the syllabus under course materials.
NRGY 235: Supplemental Material: Week 1: EIA Colorado State Energy Fact Sheet	PDF				Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Course Assessment: Week 1 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 2					
NRGY 235: Course Lessons: Week 2: Lecture 3: Introduction to the Built Environment	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Lessons:	PPT	Need to	Need to	Alt Text needed for	Review comments above about PPT accessibility.



Week 2: Lecture 4: What Makes a Building an Efficient Building? Authors: Zandy Sievers and Lagan Todd		include	include	images	
NRGY 235: Supplemental Material: Week 2: MT DEQ Brochure Energy Code Guide Checklist					Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Recreate your own checklist and upload to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Supplemental Material: Week 2: NC2009 Checklist	PDF				Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Recreate your own checklist and upload to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Supplemental Material: Week 2: MT Residential Energy Code	PDF				Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Course Assessment: Week 2 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 3					
NRGY 235: Course Lessons: Week 3: Lecture 5: Building Codes and Standards	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Lessons: Week 3: Lecture 5 Part 2: Montana Energy Code Changes	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Lessons: Week 3: Lecture 6: Sustainable Building Rating System Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Supplemental Material: Week 3: Auditor	PDF			Scanned documents are not accessible	Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus



Checklist					under course materials.
NRGY 235: Course Assessment: Week 3 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 4					
NRGY 235: Course Lessons: Week 4: Lecture 7: Energy Conservation Measure Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Lessons: Week 4: Lecture 8: Energy Modeling Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images Red text may be problematic	Review comments above about PPT accessibility.
NRGY 235: Supplemental Material: Week 4: Energy Memo	PDF				Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Supplemental Material: Week 4: Pump Coupler Fail image	JPG				Recommendation: It is not clear what this image is attached to – lecture, quiz?
NRGY 235: Supplemental Material: Week 4:SB Modeling Software Presentation	PPT				Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Course Assessment: Week 4 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 5					
NRGY 235: Course Lessons: Week 5: Lecture 9: Physics and Heat Transfer Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.



NRGY 235: Course Lessons: Week 5: Lecture 10: Physics and Heat Transfer Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images Red text may be problematic	Review comments above about PPT accessibility.
NRGY 235: Course Assessment: Week 5 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 6					
NRGY 235: Course Lessons: Week 6: Lecture 11: Fluid Mechanics Applications	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Lessons: Week 6: Lecture 12: Fluid Dynamics Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Assessment: Week 6 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 7					
NRGY 235: Course Lessons: Week 7: Lecture 13: Moisture Control Applications Authors: Zandy Sievers and Lagan Todd	PDF	Need to include	Need to include	Alt Text needed for images	
NRGY 235: Course Lessons: Week 7: Lecture 14: Heat Transfer Via Fluids and Moisture Control Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Supplemental	Excel				Recommendation: It is not clear how this document fits into



Material: Week 7: Wall Temp Profile					the week 7 lectures. Include an explanatory note in the syllabus.
NRGY 235: Course Assessment: Week 7 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 8					
NRGY 235: Course Lessons: Week 8: Lecture 15: Indoor Environmental Quality Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Looks fine	
NRGY 235: Course Lessons: Week 8: Lecture 16: Pre-Mid-Term Quiz Review and Heating and Cooling Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Supplemental Material: Week 8: 1 st Half Semester Quiz Review Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images Red text may be problematic	Review comments above about PPT accessibility.
NRGY 235: Course Assessment: Week 8 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 9					
NRGY 235: Course Assessment: Week 9: Midterm Review Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Course Materials & Learning Activities: Week 10					
NRGY 235: Course Lessons: Week 10: Lecture 17: Envelope	PDF	Need to include	Need to include	Alt Text needed for images	



Issues and Testing Authors: Zandy Sievers and Lagan Todd					
NRGY 235:Course Lessons: Week 10: Lecture 18: Duct Leakage Testing Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images Red text may be problematic	Review comments above about PPT accessibility.
NRGY 235: Supplemental Material: Week 10: ASTM E1554 Determining Air Leakage Annotated	PDF			Scan documents are not accessible	Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Supplemental Material: Week 10: ASTM E1554 Duct Leakage Testing Revised Schematics	PDF			Scan documents are not accessible	Question: Does this material come from a textbook? It is not clear if this is third party material. Recommendation: If it is third party material, then it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Supplemental Material: Week 10: BPI Infiltration and Duct Leakage Certification Scheme Handbook	PDF				Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Supplemental Material: Week 10: Energy Star Qualified Homes Guide	PDF				Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Course Assessment: Week 10 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 11					
Week 11 material was not shared					
NRGY 235: Course Materials & Learning Activities: Week 12					



NRGY 235:Course Lessons: Week 12: Lecture 19: Renewables Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235:Course Lessons: Week 12: Lecture 20: Duct Leakage Testing Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235: Supplemental Material: Week 12: Fine Homebuilding Passive House Article	PDF			Scan documents are not accessible	Question: Does this material come from an open source magazine? It is not clear if this is third party material. Recommendation: If it is third party material, then it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Supplemental Material: Week 12: Passivhaus Designers Guide	PDF				Recommendation: Third party material, so it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.
NRGY 235: Course Assessment: Week 12 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 13					
NRGY 235:Course Lessons: Week 13: Lecture 21: HVAC Systems Authors: Zandy Sievers and Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
NRGY 235:Course Lessons: Week 13: Lecture 22: HVAC Controls Authors: Zandy Sievers and	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.



Lagan Todd					
NRGY 235: Supplemental Material: Week 13: BSI-022 Perfect HVAC	PDF				<p>Question: Does this material come from an open source journal? It is not clear if this is third party material.</p> <p>Recommendation: If it is third party material, then it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.</p>
NRGY 235: Supplemental Material: Week 13: Commercial Plant Systems Photos	PDF	Need to include	Need to include	Alt Text needed for images	<p>Recommendation: Include the source for the photos. If it is third party material, then it cannot be uploaded to Skills Commons. Include a link in the syllabus under course materials.</p>
NRGY 235: Course Assessment: Week 13 Quiz	Word	Need to include	Need to include	Looks fine	
NRGY 235: Course Materials & Learning Activities: Week 14					
NOTE: Lecture 23 was not shared					
NRGY 235: Course Lessons: Week 14: Lecture 24: Authors: Lagan Todd	PPT	Need to include	Need to include	Alt Text needed for images	Review comments above about PPT accessibility.
RECYCLING TECHNOLOGY Certificate	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
Recycling Technology: Course Descriptions	Word	Looks good	Need to include		
Recycling Technology: Course List Within a Program	Word	Looks good	Need to include		
NRGY 270: Recycling Technology	Form	USDOL disclaimer	CC BY license	Accessibility	Notes from Full Tilt Ahead
NRGY 270: Course Materials (Schedule)	Word	Looks good	Need to include	Looks fine	
NRGY 270: Course Syllabus Author: Bradley Layton	Word	Looks good	Need to include	Include Missoula College's accessibility	

				statement Alt Text needed for images Red text in Weekly Topic Outline may be problematic	
NRGY 270: Final Paper Template	Word	Looks good	Need to include	Alt Text needed for image	

Question: It is not clear how the Electrician’s Helper, Energy Auditor, and Recycling Technology fit into the Energy Technology Program. I listed them as Certificates?

Questions: There are a few documents that could not be opened:

Building Energy Efficiency	Could not open the following documents: In every folder: .DS_Store Week 10 Folder: ~\$ek 8 Quiz
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Location of Materials:

FTA Review documents: <https://app.box.com/s/1o9raz9ajf8sd0ljzwab20skkn4i3oo>

Missoula College Accessibility Information:

Accessibility: <https://www.umt.edu/accessibility/>

Disability Resources: <https://www.umt.edu/accessibility/resources/default.php>

NOTE: Full Tilt Ahead has created a helpful document *General Accessibility Questions and Answers*

<https://app.box.com/s/yi2i7g4odogl6cnlbs4k8ekxocyc9eui>

Helpful links:

Accessibility checklists: <https://app.box.com/s/ljcc55huqtgdc5t9anx8qvftzcyfk6bm>

Accessibility of PPT checklist: <https://app.box.com/s/5x702tncq1klwxb52ap6up37fe4yms36>


USDOL Disclaimer: <https://app.box.com/s/vol51pv1hzi8wmmra62e4ddjzzy6njin>

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Example college logo:



Example RevUp logo:

