Rapid City
Central High School

Fundamentals of Natural Resources

Course Description:

Fundamentals of Natural Resources

Credits: 1	Approved CTE Course
Prerequisites: Biology is essential for success	Grade: 11,12

This course provides students a variety of experiences in the fields of natural resources and ecology. Students will explore hands-on projects and activities while studying topics such as land use, water quality, stewardship, and environmental agencies. Study of the natural world including biomes, land, air, water, and energy use and care as well as a focus on issues surrounding man's interaction with the Earth will be addressed in this course.

Attendance: Students are required to be in school every day. Students are responsible for communicating with their teachers to make up missed learning.

Essential Skills:

SKILL #1	**Safety**
	A. I can explain and identify safe practices. **B.** I can demonstrate and use safe practices. **C.** I can create or critique safe agricultural practices.
SKILL #2	**Agricultural Literacy**
	A. I can use relevant terminology and identify common items used in a variety of agricultural contexts. **B.** I can describe and discuss the impact of agricultural concepts on society. **C.** I can develop products for use in the real world.
SKILL #3	**Applied Science**
	A. I can analyze and interpret scientific representations and data sources. **B.** I can identify and use proper scientific processes in laboratory and field settings. **C.** I can make scientifically sound management recommendations.

Course Expectations: Although not everything is graded, everything is important. In order to demonstrate growth and learning, students will need to:

1. Participate in class activities (take notes, work in a group, complete in class tasks, ask questions) without distractions (cell phones, games, etc.)
2. Use morning time and teacher to seek help outside of class when needed.

Last Revised:

3. Complete all assessments within teacher timelines.

Grading

Learning (Practice) includes instructional activities in and outside of class and are not used in grade determination.

Skyward Assessment (Grades) may include quizzes, labs, learning checks, tests, speeches, performances, and projects.

Final Grade	
A	100% - 90%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

Calculations:

Semester Grade	
Semester Grade	**95%**
Semester Exam	**5%**
Final Grade	
Semester 1	**50%**
Semester 2	**50%**

Central High School Courses:

-Will determine grades based on student learning and growth.
-Will not include practice and behavior in grade determination.
-Will give all students regardless of absence an opportunity to demonstrate learning.
-Will not include extra credit.

Instructional Resources:

Online	Print	Other
• Canvas • FFA.org	• CASE for Learning Curriculum	• Minecraft

• TheAet.com
• MyiCEV
• Quizlet
• Kahoot
• Blooket
• You Tube
• Lesson Specific Simulators and games
• National Soil Survey Website
• Cornell Bird Identification Library
• Explor.Org Wildlife Cams
• National/State Park Websites
	• SD FFA Association ID lists
	• Project WYLD and Project WET
	• Agriscience Library
	  o Reference texts (ID books, medical dictionaries, etc.)
	  o Course textbooks
	  o Biographies of Agricultural Leaders (Temple Grandin, Norman Borlaug, etc.)
	  o Historical Texts (Sand County Almanac)
		• Classroom manipulatives and industry tools
		• Laboratory Equipment
		• Live animals and plants
		• Water and Soil and associated testing tools and equipment
		• Guest presenters
		• Field labs (outdoor) lessons
		• Leadership Development Films
		• Science Documentaries of associated content

Course Calendar/Pacing:

August/September

		30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October

2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

November

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

December

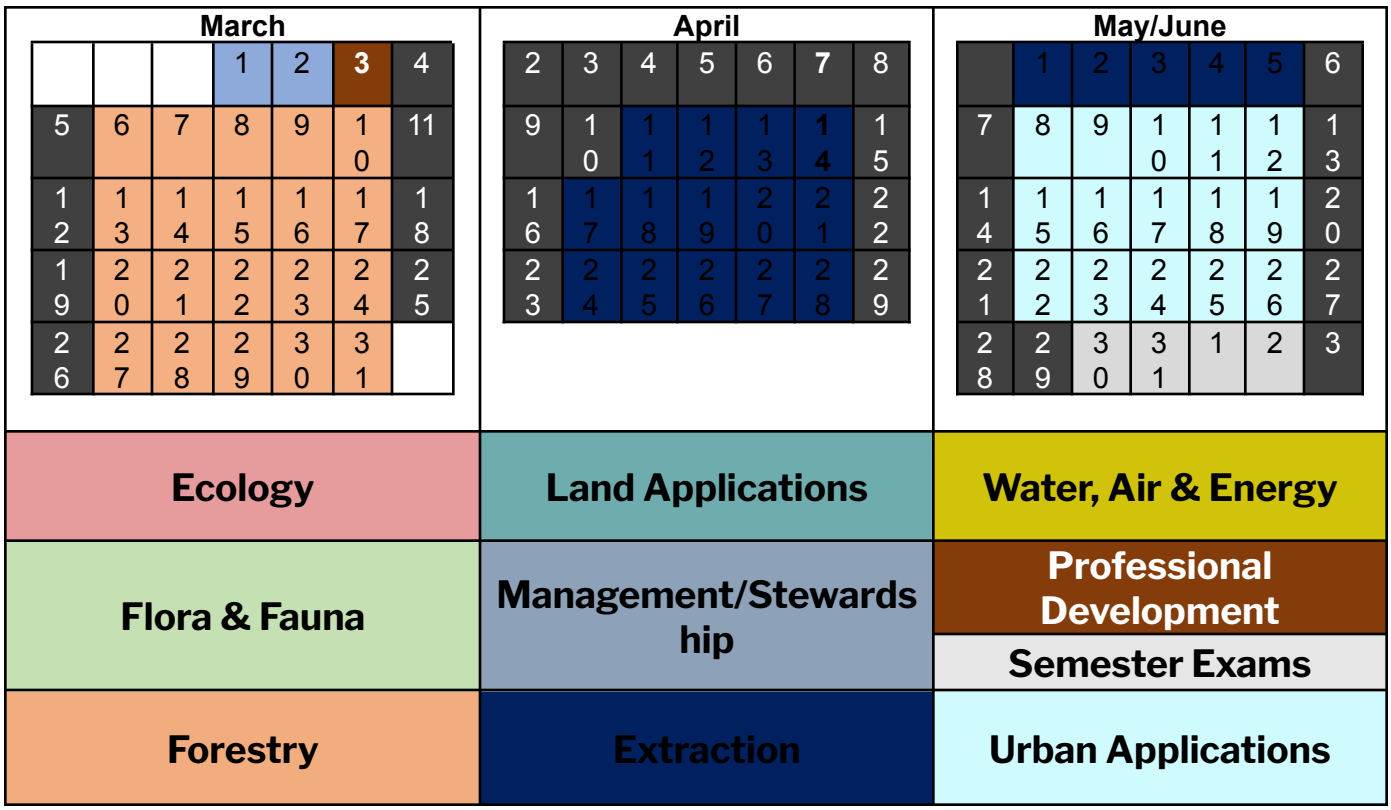
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

January

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	**23**	24	25	26	27	28
29	30	31				

February

			1	2	**3**	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				



Assessment Rubrics

Students will be assessed on their skill development using the following assessment rubrics. Students will have multiple opportunities to show growth and proficiency throughout the year. Their final grade will reflect their level of proficiency in these skills not an average of their scores on assignments and assessments throughout the year. Parents will receive updates on skill development after in class conferences with the teacher.

Skill 1: Safety			
SKILL 1A - I can explain and identify safe practices.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)
Students can identify **many** safe practices in a diverse range of settings in the **classroom, laboratory, and field.**	Students can identify **most** safe practices in a diverse range of settings in the **classroom and laboratory.**	Students can identify **some** safe practices in a diverse range of settings in the **classroom and laboratory.**	Students can identify **a few** safe practices in a diverse range of settings in the **classroom and laboratory.**

SKILL 1B - I can demonstrate and use safe practices.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)
Students utilize their knowledge of safe practices to make decisions that keep themselves safe in diverse settings and **actively improve or ensure the safety of others.**	Students utilize their knowledge of safe practices to make decisions that keep themselves safe in diverse settings **most** of the time**.**	Students utilize their knowledge of safe practices to make decisions that keep themselves safe in diverse settings **some** of the time.	Students utilize their knowledge of safe practices to make decisions that keep themselves safe in diverse settings, but **occasionally put themselves or others at risk.**
SKILL 1C - I can create or critique safe agricultural practices.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)
Students can create or critique safety practices, in verbal or written form, in a way that reduces diverse risks and **includes universal safety concerns**.	Students can create or critique safety practices, in verbal or written form, in a way that reduces diverse risks and **considers universal safety concerns**.	Students can create or critique safety practices, in verbal or written form, in a way that reduces diverse risks, **but does not consider universal concerns.**	Students can create or critique safety practices, in verbal or written form, in a way that reduces **some** risks, and **does not consider universal concerns.**

Skill 2: Agricultural Literacy

SKILL 2A - I can use relevant terminology and identify common items used in a variety of agricultural contexts.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)

Students demonstrate a **high growth** in their use of agricultural terms, and ability to identify common species and tools in diverse agricultural fields.	Students demonstrate a **significant growth** in their use of agricultural terms, and ability to identify common species and tools in diverse agricultural fields.	Students demonstrate **some growth** in their use of agricultural terms, and ability to identify common species and tools in diverse agricultural fields.	Students demonstrate **minimal growth** in their use of agricultural terms, and ability to identify common species and tools in diverse agricultural fields.
SKILL 2B - I can describe and discuss the impact of agricultural concepts on society.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)
Student can describe and/or discuss how agriculture impacts society on **private, community, and global scales.**	Student can describe and/or discuss how agriculture impacts society on **private and community scales.**	Student can describe and/or discuss how agriculture impacts society and the **private lives of people.**	Student can describe and/or discuss how agriculture impacts their **personal lives and homes.**
SKILL 2C - I can develop products for use in the real world.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)
Students can develop and use tools, documents, and practices which **meet industry standards** with an **extremely high** degree of professionalism.	Students can develop and use tools, documents, and practices which **meet industry standards** with a **high** degree of professionalism.	Students can develop and use tools, documents, and practices which **approach industry standards** with **some** professionalism.	Students can develop and use tools, documents, and practices which **attempt industry standards** with **little** professionalism.
Skill 3: Applied Science			
SKILL 3A - I can analyze and interpret scientific representations and data sources.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)

Students can **accurately** gather, use, and interpret data in the **classroom, laboratory, and field settings.**	Students can **accurately** gather, use, and interpret data in **classroom and laboratory settings.**	Students can gather, use, and interpret data with **some inaccuracies** in the **classroom or laboratory settings**.	Students **inaccurately** gather, use, and interpret data in **classroom or laboratory settings**.
SKILL 3B - I can identify and use proper scientific processes in laboratory and field settings.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)
Students **follow and describe** scientific procedures which **maximize** effect of the process, improve data quality, and maintain high-quality equipment.	Students **follow**, **or correct** procedures when missed**,** which **maintain** effect of the process, quality data, and high-quality equipment.	Students **miss steps** in procedures which **negatively impact** the effect of the process, data quality, and maintenance of equipment.	Students **miss steps** in procedures which **severely impact** the effect of process, create **unusable data**, and/or **damage equipment.**
SKILL 3C - I can make scientifically sound management recommendations.			
EXCEEDS PROFICIENCY (4)	MEETS PROFICIENCY (3)	APPROACHING PROFICIENCY (2)	DEVELOPING FOUNDATIONS (1)
Students **accurately** use and cite scientific processes, models, data analysis, and mathematical applications, leading to **high quality** management practices.	Students **accurately** use and cite scientific processes, models, data analysis, and mathematical applications, leading to **quality** management practices.	Students use scientific processes, models, data analysis, and mathematical applications **with some inaccuracies**, leading to **flawed** management practices.	Students use scientific processes, models, data analysis, and mathematical applications **with multiple inaccuracies**, leading to **problematic** management practices.