To modify the **Rectangle** class so that when we iterate over an instance, we get the length and width in the specified format, we can adjust the **__iter__** method to yield dictionaries instead of just values.

Example:

```python
class Rectangle:
    def __init__(self, length: int, width: int):
        self.length = length
        self.width = width

    def __iter__(self):
        # Yielding dictionaries for length and width
        yield {'length': self.length}
        yield {'width': self.width}

# Example of creating an instance of the Rectangle class
my_rectangle = Rectangle(5, 3)

# Now we can iterate over my_rectangle
for dimension in my_rectangle:
    print(dimension)
```