

Student Outcomes and Performance Indicators – **Faculty Assessment**  
Department of Engineering & Engineering Technology  
College of Professional Studies  
Metropolitan State University of Denver

**EET 3690 (5)**

**FIBER OPTICS**

**Semester/year**

**Specific, *Measurable* Student Behavioral Learning Objectives:**

Upon completion of this course the student should be able to:

1. Perform fiber optic parametric calculations.
2. Define the types of optical fibers, their characteristics, and applications.
3. Identify and compare optical transmission standards
4. Analyze and design fiber optic networks.
5. Compare and contrast optical light sources and receivers with respect to:
  - a. Power Capacity
  - b. Spectrum and Spectral Width
  - c. Modulation types and speeds
  - d. Applications

ABET	Competency Area	Data Collection
d	an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives	
f	an ability to identify, analyze, and solve broadly-defined engineering technology problems	

ADDITIONAL COMMENTS:

PLEASE:

1. MAKE SURE ALL REFERENCES ARE IN Y DRIVE;
2. SAVE THIS FILE UNDER THE COURSE NUMBER, FOR EXAMPLE: CET1000 SPRING 2018.DOC;
3. SEND YOUR REPORT TO LINDA;

\_\_\_\_\_  
<Name>

\_\_\_\_\_  
<Date>

Following tables define the Performance Indicators for each of the Student Outcomes a through k

Student Outcomes and Performance Indicators – **Faculty Assessment**  
 Department of Engineering & Engineering Technology  
 College of Professional Studies  
 Metropolitan State University of Denver

ABET d: an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives				
	Unsatisfactory	Developing	Satisfactory	Exemplary
Establish criteria for engineering technology design problems	Unable to develop or understand design criteria	Understand the design criteria but unable to develop	Understand and developed some criteria in assigned problem	Proper solutions obtained
Develop designs of products, systems, or processes that respond to authentic needs	Unaware of or not understanding the needs	Knowledge or skill set not enough for solving the engineering technology problem	70% partial solution or better	Proper solutions obtained
Take into account the social, economic, or environmental constraints on the design	Unaware of the impacts the issues	Some awareness, but not clear	Understand the issues but unable to incorporate into the design problem	Proper considerations discussed and planned ahead

Student Outcomes and Performance Indicators – **Faculty Assessment**  
 Department of Engineering & Engineering Technology  
 College of Professional Studies  
 Metropolitan State University of Denver

ABET f: an ability to identify, analyze, and solve broadly-defined engineering technology problems				
	Unsatisfactory	Developing	Satisfactory	Exemplary
Identify and describe technical problems	Unable to understand problem	Understand the problem but unable to provide solutions	Some solutions or ideas in solving the problem	Proper solution obtained
Recognize standard procedures in solving specific technical problem	Unaware of standard procedures	Realize standard solution procedures but unable to implement	Some solutions are obtained	Properly use standard solution procedure or provide alternate ways of solutions
Manage information and solve technical problems	Unable to gather information needed	Unaware of the importance of managing and documenting information	Some management and documentation of information	Proper documentation and management of information