COURSE NUMBER: EET 108

TITLE: Intro to Fiber Optics

CREDITS: 5

COURSE LENGTH: 11 weeks for fall, winter, spring quarter / 8 weeks for summer quarter

COURSE DESCRIPTION:

Fiber optics is an emerging technology that is increasingly applied to cutting edge technology in aerospace, broadband cable systems, IT networks and general electronics. This course will have a dual focus of (1) preparing students to work in the fiber optics field within the aerospace industry and (2) a more general application to the larger use of fiber in cable systems and information technology networks. Participants will learn fiber optic theory as well as how to work safely with materials used in fiber optics, while learning to handle materials properly during the routing, installation, cleaning, measurement, and inspection processes.

INSTRUCTOR:

Tracy Huston Phone: 206-934-3730

E-mail: Tracy.Huston@seattlecolleges.edu

My school website: http://facweb.northseattle.edu/thuston

Office hours will be during lab time in class or by appointment.

Required Texts: FOA Reference Guide to Fiber Optics: Study Guide to FOA Certification [Paperback] *Jim Hayes* (Author)

**COURSE OUTCOMES/LEARNING OBJECTIVES**

Students who successfully complete the Fiber Optics course will be able to demonstrate their ability to:

1. Work Safely with Materials used for fiber optic routing, installation, assembly, cleaning and testing

2. Handle fiber optic material during routing and installation

3. Handle fiber optic material to protect the cables from damage during assembly, cleaning and testing

4. Route and install fiber optic assembly with proper routing, protection, tying, support, slack, and drip loops

5. Install connector receptacles

6. Insert fiber optic terminals into connector inserts

7. Assemble fiber optic cable connectors

8. Mate fiber optic connectors used with fiber optic cables

9. Apply bundle ties

10. Inspect fiber optic terminals for cleanliness and damage

11. Clean fiber optic terminals

12. Determine light loss budget and test fiber optic cables

**Grade Assignment**

**96 - 100 % 4.0**

**95 3.9**

**94 3.8**

**93 3.7**

**92 3.6**

**91 3.5**

**90 3.4 76 2.0**

**89 3.3 75 1.9**

**88 3.2 74 1.8**

**87 3.1 73 1.7**

**86 3.0 72 1.6**

**85 2.9 71 1.5**

**84 2.8 70 1.4**

**83 2.7 69 1.3**

**82 2.6 68 1.2**

**81 2.5 67 1.1**

**80 2.4 66 1.0**

**79 2.3 65 .9**

**78 2.2 64 .8**

**77 2.1 63 .7**

**62 .0**

NSCC Grading System: See [Student Handbook](http://webshare.northseattle.edu/College%20publications/Student%20Handbook%20HB4.pdf)

**PARTICIPATION/TEAMWORK/CONDUCT:**

Your success in this course will be strongly influenced by your participation, conduct and ability to work as a team player. In industry these are referred to as soft skills and possession of them is critical to your success.

You are responsible for attendance. Punctuality is expected. Missed lecture and lab material may be obtained from your fellow students. **As this is largely a lab environment, safety and appropriate behavior will be stressed. Behavior deemed disruptive to the class may be cause for dismissal under the provisions of the Student Code of Conduct.**

We will be sharing this classroom with other classes. It is imperative that we leave this room ready for the next class. That includes a functional computer and a tidy workspace.

**INTERNET USE:**

It is the NSCC policy not to restrict student Internet access. **It may be deemed disruptive behavior to view Internet material offensive to those around them. Use of the Internet, which is deemed disruptive behavior during lecture or labs, may lead to dismissal under the provisions of the Student Code of Conduct.**

**Computing Services software copyright Policy.**

It is the intent of the Seattle Community College District to adhere to all provisions and amendments of Section 117, Title 17 of the United States code that regulates copyright laws in the area of microcomputer programs.

Quoted below is the relevant part of the Policy:

I. Illegal copies of copyrighted software may not be made or used on college equipment.

II. When copyrighted software is used on a disk sharing system, efforts will be made to secure this software from copying.

III. No employee of the District shall encourage or allow any student to surreptitiously or illegally duplicate computer software or access any database or electronic bulletin board.

**ACCOMMODATIONS**

In my commitment to student learning I want to support all students. If you have a disability that will affect your performance in this class please let me know. Students with disabilities are encouraged to use disability services for support in implementing reasonable accommodations for their disabilities.

For Academic Accommodations: <https://northseattle.edu/disability-services>

NSCC SERVICES <https://northseattle.edu/services>

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| **HOLIDAYS: <http://www.seattlecolleges.edu/DISTRICT/calendar/academiccalendar.aspx>** |  |  |

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