ECE 6323 ASSIGNMENT
Paper on Photonics Devices and Modules

Choose ONE of the topics within each category and write a 2-to-3-page paper, single-space, illustration included (but not disproportionately). NOT included in the 2-3 pages is the Reference, which is required. The title of your paper is not a topic, it should be about a subject of the topic.

A- Category 1 - Devices:

a- Device class a: Advanced amplifier, Wavelength division mux/demux passive and active devices and modules (including filters).

b- Device class b: Integrated photonic modules.

B- Category 2 - Module/Sub-system: ROADM (about their functions, but not how they are applied in a network. See the assignment on Network if you are interested only on ROADM application).

The purpose of the paper is to encourage you to read technical materials, gain understanding, and compose an expository piece of writing that demonstrates your knowledge as well as technical communication skills. Use the following criteria for your paper:

1- The title of your paper must indicate the topic. Example: WDM is a very broad category and there are many devices, active or passive. Be careful how you choose yours. Similarly, ROADM is a very broad class of modules, you may choose one with certain key function, such as OXC, and describe how it works.

2- Write the paper with a focus on key technical points that reflect what you learn about OFC- write like an engineer, not as a lay person without technical training.

3- Must have complete references of where you obtain the information

4- Please be careful in using Wiki as sources. You must be responsible for the source of information. If it is wrong, outdated, or inadequate, it will be your responsibility.

As a suggestion, the paper should include:

- An introduction or over all description of the subject (if someone doesn't have any idea, how would you introduce the concept to that person). (Not too long)

- Technical details: how it works (if it is a device or module), what are performance criteria or merits, and how it is used in optical communication. If it is about network and system, describes the architecture, how to achieve the intended design. (you may have several sub-sections – this is the important part).

- Current key issues: what are the current issues with the technology or the objects of your topic, what is the future?

- Summary and conclusion.

- Make sure the length of each section is appropriate, e. g. do not write 2.5 pages of introduction and 0.5 page for all the rest.