**Qualifying exam in biomedical imaging. For any questions email greenbaum@ncsu.edu**

Date: September 19 (Monday) 10 am -> September 20 (Tuesday) 10 am (email back).

Format: take home, 24 hours, open material

Reading material:

1. From the book: “Fundamentals of Photonics”, Chandrasekhar Roychoudhuri, SPIE (open access), <https://spie.org/publications/fundamentals-of-photonics-modules>:

* Module 1.1 – Nature and properties of light
* Module 1.2 – Light sources and laser safety
* Module 1.3 – Basic geometrical optics
* Module 1.4 – Basic physical optics

1. From the book: “Biophotonics from concepts to applications”, Gerd Keiser. Open access from the library.
   * Chapter 8 (Microscopy)
   * Chapter 9 (Spectroscopic Methodologies)
2. Paper: Tissue clearing and its applications in neuroscience: <https://www.nature.com/articles/s41583-019-0250-1>