

## **Independent Study/Research with Honors Faculty Fellow**

**Dr. Ruhul Kuddus**

**HONR 300R: Special Topic: Impact of Transplantation Medicine in the 21st century (Hybrid) M 1-2:15 for in person, other times online**

**Description:** Organ transplantation is the only effective method of treating terminal organ failure. Although the first human organ was successfully transplanted in 1954, widespread use of the procedure was impeded until effective immunosuppressive drugs were developed in the 1960s and 1970s. The rapid progress in surgical and medical procedures has since created 'shortages of donor organs' as the new principal obstacle to the field of transplantation medicine. Vital human organs can only be extracted from a deceased person of good health. Non-vital organs (such as one of the two kidneys and part of the skin or liver) can be obtained from a healthy live individual. Thus, organ donation has always been a subject of intense ethical and legal scrutiny. The supply gap has created a significant waiting list, leading to increased morbidity, mortality, and economic losses. It has also contributed to various social, cultural, and financial issues, such as illegal organ trade and human trafficking, while simultaneously inspiring new research on stem cell creation for organs and the use of animal organs for transplantation. The current course examines the scientific, ethical, legal, social, and economic implications of transplantation medicine in some developed and developing nations.

### **Course format**

The course will be designed as a hybrid course with one 75-minute face-to-face session per week. The course will be centered on 14 recent review articles (1 article/week) featuring different aspects of the implications of transplantation medicine. The instructor will summarize the subject area of the article of the week in every face-to-face session of the course. In addition, one or more students (based on class size) will have a 20-minute slot to present a part of the article of the week. The instructor will involve students in collecting data on some aspects of transplantation medicine in the United States, analyzing the data using statistical tools, and writing a research manuscript (based on the analysis) to be submitted for publication. Additionally, the instructor will organize a field trip for students to meet with organ procurement coordinators, transplant nurses, and physicians at a regional hospital. The grading for the course will be based on student participation, writing/submitting reports, and audiovisual presentation.

(subject to revisions).

Dr. Kuddus is a world expert on this issue, and students will assist in the preparation of a publishable paper on the topic. This class may be substituted for HONR 2000 or HONR 2100 by students with more than 40 credits and who have completed ENGL 2010/2010H