Course: CHEM 503 – Drug Discovery
Instructor: Youla S. Tsantrizos
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Brief course description:
The aim of this course is to provide an introduction to the overall Drug Discovery Process, focusing mainly on the Research part of the Research and Development (R&D) pipeline of drug discovery. The main focus of the course will be on medicinal chemistry. Organic synthesis and catalysis are also key components of the course, focusing mainly on heterocyclic chemistry, high throughput library synthesis of biologically active compounds and some aspects of efficient large-scale production of pharmaceutical agents. However, other field of research that are relevant to drug discovery, including structural research (e.g. NMR, X-ray, ITC, DSF etc), biochemistry, pharmacology, metabolism and bioavailability will also be included. Drug Discovery is a multidisciplinary field of science that includes a strong component of Organic Chemistry and Biology (i.e. Biochemistry/Pharmacology) at the molecular level. Case studies from all major therapeutic areas will be discussed.

Method of Delivery:
On-Line delivery using ZOOM is very likely; however, since this is an advanced level course with a small number of student enrolment, on-campus delivery may be possible, in order to more easily allow in-class discussions. In either case, the lectures will be recorded and posted on myCources

Evaluation Scheme:

Course Evaluation for On-Line delivery
The course evaluation will be based on two Research Term Papers and two Oral Exams using ZOOM Research Term Papers 2x30%, for a total of 60%
Oral Exams 2x20%, for a total of 40%
(the dates and time allowed for each evaluation will be determined later)

Total Final Grade 100%

Course Evaluation for On-Campus delivery
The course evaluation will be based on two Research Term Papers and two written exams that will be taken during class
Research Term Papers 2x30%, for a total of 60%
Exams 2x20%, for a total of 40%
(the dates and time allowed for each evaluation will be determined later)

Total Final Grade 100%