## JAMESTOWN COMMUNITY COLLEGE

# **State University of New York**

## **Master Course Syllabus**

Course Title: Petroleum Geology

Course Abbreviation and Number: GLG 1760

Credit Hours: 1 Division: STEM Course Type: Lecture

Course Description: Petroleum resources constitute a major source of energy for our transportation, home, and industrial needs on a national and global basis. Students will gain an insight into the geology of petroleum (oil and gas), and develop an understanding of its origin, occurrence, and geologic controls. Students will increase their knowledge of economic, environmental, and geopolitical considerations as related to petroleum prospect development. Practice in prospect analysis will be obtained through a series of exercises which demonstrate basic use of wireline logs and subsurface maps.

Eligibility: ENG 1530.

**Course Attributes:** E,L,N

(C=Career, E=Elective, H=Humanities, L=Liberal Arts & Sciences, N=Mathematics/Sciences, S=Social Sciences; VEDP=Values, Ethics & Diverse Perspectives)
4-letter codes represent SUNY General Education Courses, please see below to determine which SUNY General Education requirement(s) is met.

#### **Student Learning Outcomes:**

After the successful completion of this course students will be able to:

- 1. Describe the geologic history of petroleum deposits in terms of the original depositional environment, the types of organisms that "became" petroleum, and the geologic time line of petroleum deposits.
- 2. Describe the types and ages of geologic formations that contain petroleum deposits.
- 3. Identify / discuss the geologic and geophysical tools for prospecting for oil.
- 4. Interpret geologic and geophysical evidence for locating a petroleum prospect.
- 5. Cite several benefits and hazards related to petroleum prospect development in terms of economics, the environment, and in terms of regional or international politics.

### Additional Student Learning Outcomes that meet SUNY General Education Requirements:

Does this course meet a SUNY General Education requirement(s)? 
Yes No

#### **Topical Outline:**

- Geologic and biologic history of petroleum formation.
- Geologic formations that contain petroleum
- Geologic and geophysical tools for petroleum exploration: descriptions and interpretations.
- New York State petroleum geology.
- Benefits and hazards related to petroleum prospect development in terms of economics, the environment, and in terms of regional or international politics.

#### **Signatures and Dates:**

Discipline Director: Nancy Bryant (director)

Date: 12/16/09

Academic Affairs: CR Date: 1/12/2010

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**Effective Date: Spring 2010**