

**Division of Natural Science**<http://natsci.info.yorku.ca/>**Course Outline**

NATS1810 M, Energy

Winter 2019

Monday and Wednesday, 11:30 – 2:30 pm, Stedman Lecture Hall (SLH) A

**Course Instructor and Contact Information****Dr. Stephanie Pugliese Domenikos**

Assistant Professor, Teaching Stream, Department of Science and Technology Studies

Chemistry Building Room 352

Phone: 416-736-2100 ext. 22912 (no voicemail – leave message by email)

**Course email:** [nats1810@yorku.ca](mailto:nats1810@yorku.ca) (use your @mymail.yorku.ca account)**Course website:** <https://moodle.yorku.ca>**Office hours:** Drop-in office hours January-May (no appointment necessary) or set up by email**Email Policies and Etiquette:**

- Use only your @mymail.yorku.ca account (email with other accounts may be filtered)
- Allow 24-48 hours for a response
- Use for general course questions or personal issues (ex. Illness, missing of a midterm, setting up an appointment, etc.)
- Provide a descriptive subject header (ex. "Missing midterm due to illness")
- Be polite and professional
- Write in clear sentences without using slang, text lingo or vulgar terms
- Sign off with first and last name

**Expanded Course Description**

Energy is a key resource in our modern society. Its generation, transmission and distribution are an important factor in the economic prosperity we have achieved in the western world. This course will look at some of the basic principles behind energy, the technology we use to generate it, and the side effects such as pollution and global warming that are a direct result of our energy usage. We will look in detail at the most common current energy sources such as fossil fuels and nuclear power, as well as looking at alternative energy sources such as the various renewable technologies as well as the possibility of fusion energy. The course will also take a look at how our politics both locally and globally are affected by the supply and demand of energy

resources. Current events that are relevant to the course will be discussed.

### Course Learning Outcomes

Upon successful completion of this course students should be able to:

- Demonstrate an understanding of the relationship between work, energy and power
- Name and describe the main forms of energy production and consumption
- Discuss the differences between renewable and non-renewable energy sources
- Identify the environmental and social impacts of different energy production sources
- Evaluate their personal energy consumption
- Discuss recent news items regarding local and global energy production and consumption

### Evaluation

Assessment	Weight	Due date
iClicker Cloud in-class participation	5 %	Every class
In-Class Activities	10 % (top 5 activities, 2 % each)	Throughout term
Assignment 1 – Blog Post	5 %	January 23, 2019
Assignment 2 – Personal Energy Use Calculator	10 %	February 25, 2019
Assignment 3 – Future of Ontario Energy	10 %	April 1, 2019
Midterm 1	15 %	February 6, 2019
Midterm 2	15 %	March 13, 2019
Final Exam	30 %	April exam period (Apr. 5-20)

#### **Statement on grades and extra credit assignments:**

In order to be fair and consistent to the entire class, individual grades are not negotiable and “extra credit” assignments are not provided at any point during or after the course. Please contact the instructor about a grade **only** if there is a clear error (calculation, clerical, etc.) within two weeks of the grade being made available to you.

## Course Materials

### **Recommended eBook:**

**Dunlap, Richard A. Sustainable Energy 2E. Cengage Learning Inc.**

- Purchase through the York Bookstore:  
[https://www.bookstore.yorku.ca/buy\\_textbooks.asp?](https://www.bookstore.yorku.ca/buy_textbooks.asp?)

### **Required iClicker Reef:**

- Use your laptop or smartphone for this activity – let Dr. Pugliese Domenikos know if you don't own either technology
- Download the app – see instructions here: <http://lts.info.yorku.ca/polling-student/>

## Laboratory/Tutorial

This course does not have a laboratory or tutorial component

## Course Content and Format

This course spans over a single semester, with two 3-hour lectures per week. Lectures will be interactive. Over the entire course, there will be 2 midterms, a final exam, 3 assignments, and a variety of in-class activities.

Midterms and final exam will be a combination of multiple choice, problem solving and short answer.

## Math Content

Basic concepts as covered in Ontario Grade 10 Math

## Course Policies

### **Questions and Concerns**

Questions and concerns should be directed to the Dr. Stephanie Pugliese Domenikos either during class time or during office hours. You can also email questions to the course mailbox ([nats1810@yorku.ca](mailto:nats1810@yorku.ca)) where they will be responded to in 24-48 hours.

### **Conduct during Assessments**

In-class midterms: Midterms will start promptly at 11:30 am. During in-class midterms, all notes, aids and electronic devices must be placed under your chair, and all electronic devices must be turned off.

In-class activities: Activities, such as case studies, will occur occasionally during class time. During this time, students are allowed to work in groups and access their notes or any other resources. Discussion is encouraged and students are welcome to ask for

help.

### **Conduct during Lecture**

During lecture students may use smartphones or laptops for iClicker participation and note taking. However, use of electronics for any personal purposes will not be tolerated. Volume for all devices must be disabled.

### **Policy for a Missed Midterms/Quizzes/Final Exam**

Midterm: If a midterm is missed, you must email an Attending Physician's Statement (<http://registrar.yorku.ca/pdf/attending-physicians-statement.pdf>) to the course email (nats1810@yorku.ca) **within 48 hours of the missed midterm**. If exemption is granted for the missed midterm, the missed component will be added to the final exam. There are no make-up tests.

Final Exam: There will be one deferred exam scheduled at the same time for all students who miss the final exam.

### **Late Submissions and Late Penalties**

Late assignments should be submitted directly to the Moodle site. A penalty of 10 % per day (including weekends) will be enforced, up to a period of 10 days where the assignment will then receive a grade of zero.

### **Reappraisal Requests**

If you require a reappraisal of work that has been submitted and marked, an email must be sent to the course email ([nats1810@yorku.ca](mailto:nats1810@yorku.ca)) to set up an appointment with the course instructor. Valid reasoning must be provided to request a reappraisal.

## **Copyright and Intellectual Property**

In order to protect copyright and intellectual property, you may not:

- Upload any course content\* to any website
- Record lectures for non-personal use
- Photograph class activities

\*Course content includes any activities, documents or files connected to this course, including lecture slides, recordings, images, tests, quiz questions, in class participation exercises, and assignments.

## **University Policies**

### **Important Sessional Dates – Winter 2019 Term**

Winter classes start: January 3, 2018

Winter Reading Week (no classes, University open): Feb. 16-22, 2019

Winter classes end: April 3, 2019

Last date to submit Winter term work: April 3, 2019

Winter study day (no classes, University open): April 4, 2019

Winter examinations: April 5-20, 2019

### **Academic Honesty and Integrity**

Academic honesty requires that persons do not falsely claim credit for the ideas, writing or other intellectual property of others, either by presenting such works as their own or through impersonation. Similarly, academic honesty requires that persons do not cheat (attempt to gain an improper advantage

in an academic evaluation), nor attempt or actually alter, suppress, falsify or fabricate any research data or results, official academic record, application or document. Finally, academic honesty requires that persons do not aid or abet others to commit an offence of academic dishonesty, including intentional acts to disrupt academic activities.

Suspected breaches of academic honesty will be investigated and charges shall be laid if reasonable and probable grounds exist.

#### Academic Honesty and electronic devices during assessments (e.g. exams)

- Internet capable and personal storage devices of all kinds must be turned off, including vibrate. These and any other unauthorized material must be placed under the student's chair and should not be accessed at any point during the exam. Failure to comply with directive may be considered a break of academic honesty.
- See <http://registrar.yorku.ca/exams/tipsheet>

Please familiarize yourself with the full Senate Policy on Academic Honesty, found at <http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>

Please also familiarize yourself with the SPARK Academic Honesty tutorial found at <https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/>

#### **Academic Accommodation for Students with Disabilities**

York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses.

Please familiarize yourself with the full Senate Policy on Academic Accommodations for Students with Disabilities, found at <http://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/>

**Note: Students should submit accommodation letters from Counseling and Disability Services (CDS) to the course instructor within the first two weeks of the course or as soon as issued.**

Counseling and Disability Services - <http://cds.info.yorku.ca/>

York Accessibility Hub - <http://accessibilityhub.info.yorku.ca/>

**Note: A student registered with CDS, and choosing to write with Alternate Exams, is responsible for making the appropriate writing arrangements within the timeframes outlined by Alternate Exams.**

Alternate Exams - <http://altexams.students.yorku.ca/>

#### **Religious Observance Accommodation**

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents.

<https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/15/wo/kmHGekTpzKLX6XYKBXyc8M/0.3.4.62.0>

**Note: Students who will have an academic conflict as a result of a religious observance, at any point in the term, should make the instructor aware of such at least three weeks prior to the conflict.**

For conflicts occurring during an official examination period, please complete the Examination Accommodation Form available at [http://www.registrar.yorku.ca/pdf/exam\\_accommodation.pdf](http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf) and submit to your instructor at least three weeks prior to the final exam.

### **Student Conduct in Academic Situations**

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. A statement of the policy and procedures regarding disruptive and/or harassing behaviour by students in academic situations is available on the website of the University Secretariat (<http://secretariat.info.yorku.ca/>).

### **Division of Natural Science Resources**

#### **NATS-AID**

Free peer tutoring for students enrolled in Natural Science Courses.

See <http://natsci.info.yorku.ca/nats-aid/>

#### **M-AID in NATS (Math Aid)**

Free math help for students enrolled in Natural Science Courses (TA tutors)

See <http://natsci.info.yorku.ca/m-aid-in-nats/>

### **Other Resources**

#### **Learning Commons**

The Learning Commons brings together key supports for your learning: writing, research, learning skills and career services. <http://www.library.yorku.ca/cms/learning-commons/>

#### **goSAFE**

goSAFE is a complimentary service provided to the York Community. At the Keele campus, goSAFE has two routes: North Route & South Route which will safely transport community members by vehicle from one specified hub to another on campus. goSAFE operates seven days a week, all year round, including University closures (with the exception at Glendon during the Christmas holiday closure).

Call the goSAFE office at 416-736-5454 or extension 55454 during hours of operation. Please give your name, location and destination. <http://www.yorku.ca/goSAFE/>

#### **Mental Health and Wellness at York University**

Outlines a variety of resources available to support mental health and wellness

<http://mhw.info.yorku.ca/resources/resources-at-york/students/>

#### **Good2Talk**

Post-Secondary Student 24 hour Helpline

<http://www.good2talk.ca/> 1-866-925-5454