

Course Change Request

New Course Proposal

Date Submitted: 04/02/18 12:18 pm

Viewing: **COS 402 : Special Topics in Science**

Last edit: 04/02/18 3:36 pm

Changes proposed by: jbazaz

Are you completing this form on someone else's behalf?

No

Effective Term: Fall 2018

Subject Code: COS - College of Science

Course Number:
402

Bundled Courses:

Equivalent
Courses:

Catalog Title: Special Topics in Science

Banner Title: Special Topics in Science

Will section titles
vary by semester? Yes

Credits: 1-4

In Workflow

1. Registrar-Courses:Repeatable RT
2. SC Curriculum Committee
3. SC Associate Dean
4. Assoc Provost-Undergraduate
5. Registrar-Courses
6. Banner

Approval Path

1. 04/02/18 3:38 pm
Rebekah Zacharias
(rzachari): Approved
for Registrar-Courses:Repeatable-RT

Schedule Type: Lecture -Repeatable within the Term

Hours of Lecture or Seminar per week: 3

Repeatable: May be repeated within term (RT)

Max Allowable Credits:

8

Default Grade Mode: Undergraduate Regular

Additional Prerequisite(s):

Additional Corequisite(s):

Required Prerequisite(s) / Corequisite(s) (Updates only):

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

And/Or	(Course/Test Code	Min Grade/Score	Academic Level)	Concurrency?	

Registration Restrictions (Updates only):

Registrar's Office Use Only - Registration Restrictions:

Field(s) of Study:

Class(es):

Level(s):

Degree(s):

School(s):

Catalog Description:

Explore an array of exciting topics in science; the course's topic will vary by section offered.

Justification:

As new opportunities and faculty are emerging, the college needs a special topics course to offer new topics that don't necessarily fit under any one particular department's course prefix.

An example/sample syllabus is attached, but each section will vary.

Does this course cover material which crosses into another department? No

Learning Outcomes:

**Attach Syllabus
(PDFs only)**

[ExampleCOS402602Syllabus.pdf](#)

**Additional
Attachments (PDFs
only)**

Staffing:

Varies by topic and semester.

**Relationship to
Existing Programs:**

None, although ideally this course will be added to program requirement lists, likely as an elective option.

**Relationship to
Existing Courses:**

None.

**Additional
Comments:**

**Reviewer
Comments**



Example Syllabus for COS 402/602: Special Topics in Science

Section Topic: GRID EDGE Seminar on Energy Innovation

Course Details:

Course Meeting Dates/Times: Fall 2018
Webinar Dates/Time: (TBD)

DESCRIPTION

The GRID EDGE Seminar on Energy Innovation brings business and government decision makers and thought leaders to Mason to share their insights on the key issues and trends driving innovation in the energy sector. Mason faculty will also present special topics during the course.

This seminar will highlight efforts of leading companies and organizations to deploy low-carbon business strategies and technologies while enhancing economic growth and profits. In this seminar series, we will highlight emerging career opportunities and the skills necessary to participate in the *low carbon* energy economy, focusing on segments such as renewable energy generation, digital energy, carbon pricing, building efficiency, energy storage, cyber infrastructure, electric mobility, and smart grid infrastructure.

Participants will experience an interactive exposure to the business, technical and policy principles driving the low carbon energy movement, and the STEM implications of the transition. The program will consist of seminar participation, team projects, blog posts, assigned readings, an essay and class presentation. Material for the course will be provided by the instructors.

Graduate students will have graduate-level assignments and will be graded on the graduate scale.

OBJECTIVE OF THE COURSE

The goals of the course will include:

1. Expand the breadth and depth of students' understanding of grid edge segments and trends, and their relevance to business and government strategy and practice.
2. Complement the university STEM studies and courses by creating a bridge to the corporate and government energy sectors.
3. Facilitate interaction between STEM-related students, alumni, thought leaders, and prospective employers.
4. Apply analytic skills to develop an informed point of view on current trends, challenges, and controversies related to the business of energy innovation.

5. Broaden student learning about models of practice in team collaboration and problem solving.

This program is dependent on both class discussion and activities to meet the objectives. Successful completion of the course requires regular attendance, participation, and punctual completion of assigned course activities. These will include:

A. Seminar Participation

Active in-person participation is an important part of the learning process in this course. You will learn a great deal from the ideas of others in the class. It is essential that you come to the seminars prepared to ask insightful questions of the speaker and share your insights with others. You will be evaluated on the quality of your contributions and insights. A contribution to class discussions builds on the preceding discussion and generates new insights.

Good inputs, both in class and in writing, are insightful and relevant. They should use logic and evidence (e.g. specific topics from the presentation) and should do more than just express an opinion. Comments may also relate a personal experience or current event that helps to illuminate the ideas being discussed. Quality of comments is more important than quantity and dominating class discussions can negatively affect your participation grade.

C. Class Assignments

Each class the students will be given either a *team or individual* assignment related to in-class activities which they will be expected to upload via blackboard or the course site.

B. Team Execution

All seminar speakers are leaders in their specific fields, who are taking their time to contribute to your academic experience at George Mason. As host teams, you are expected to thoroughly review the readings and background material for your speaker, and connect with the speaker to provide background and context of the seminar and provide guidance to the speaker on key questions. It is critical that the host team also orients the other students to the speaker's topic, raises the level of interest and awareness, and provides a briefing for other participants.

Host teams have 2-4 members. The host team helps to promote interaction between the speaker and the students, ensures a well-prepared audience, and develops thoughtful questions based on the readings. Clearly identified roles and responsibilities for each team member must be documented for effective team execution.

D. Final Essay and Presentation

At the end of the semester, the instructor will provide a small number of core questions raised or discussed during the seminar course, and each student will complete a 1,000-word (single-spaced) essay responding to **one** of these questions. The essay should clearly answer the question and provide support for their argument using insights from the speakers or other cited

sources. Finally, the instructor will provide a list of grid edge topics from which each student may select **one** to present an 6-8 minute, Ted-style talk to the class.

Grading and Course Requirements

Evaluation for the course will be based on the following criteria:

Seminar Participation	30%
Class Assignments	30%
Team Execution	20%
Final Essay	10%
Seminar Presentation	10%

General Course Policies (Including Sample language for Policies on Electronic Devices)

Regarding electronic devices (such as laptops, cell phones, etc.), please be respectful of your peers and your instructor and do not engage in activities that are unrelated to class. Such disruptions show a lack of professionalism and may affect your participation grade.

University Requirements:

The integrity of the University community is affected by the individual choices made by each of us. Mason has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using MLA or APA format. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.

Disability Accommodations

If you are a student with a disability and you need academic accommodations, please see me and contact Disability Services at 993-2474, <http://ds.gmu.edu>. All academic accommodations must be arranged through Disability Services.

Diversity and Inclusion

Diversity and inclusion are part of Mason's core values; they will be exercised in this course.

Sexual Harassment, Sexual Misconduct, and Interpersonal Violence

As a faculty member and designated "Responsible Employee," I am required to report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's [Title IX Coordinator](#) per [university policy 1412](#). If you wish to speak with someone confidentially, please contact the [Student Support and Advocacy Center](#) (703-380-1434), [Counseling and](#)

[Psychological Services](#) (703-993-2380), [Student Health Services](#), or [Mason's Title IX Coordinator](#) (703-993-8730; cde@gmu.edu).

Privacy

Students must use their MasonLive email account to receive important University information, including communications related to this class. I will not respond to messages sent from or send messages to a non-Mason email address.

Course Schedule

Below is a fifteen-week proposed schedule for the course speakers and topics.

Sessions	Assignments
Week 1	Introduction to the Grid Edge Form Teams Class Assignment #1
Week 2	Blackboard Assignment #1 Team Meeting
Week 3	Guest Speaker 1 Class Assignment #2
Week 4	Blackboard Assignment #2 Team Meeting
Week 5	Guest Speaker 2 Class Assignment #3
Week 6	Blackboard Assignment #3 Team Meeting
Week 7	Guest Speaker 3 Class Assignment #4
Week 8	Blackboard Assignment #4 Team Meeting
Week 9	Guest Speaker 4 Class Assignment #5
Week 10	Blackboard Assignment #5 Team Meeting
Week 11	Guest Speaker 5 Class Assignment #6
Week 12	Blackboard Assignment #6 Team Meeting
Week 13	Guest Speaker 6 Class Assignment #7
Week 14	Blackboard Assignment #7 Final Essay Team Meeting
Week 15	Seminar Presentations