OFFICIAL UNDERGRADUATE COURSE OUTLINE (page 1)

UNIVERSITY OF THE FRASER VALLEY

COURSE IMPLEMENTATION DATE:	September 2010
COURSE REVISED IMPLEMENTATION DATE:	
COURSE TO BE REVIEWED: *(four years after UPAC approval)*	October 2013 *(month, year)*

OFFICIAL UNDERGRADUATE COURSE OUTLINE INFORMATION

Students are advised to keep course outlines in personal files for future use.

Shaded headings are subject to change at the discretion of the department – see course syllabus available from instructor

PHYS 408	Physics/Science	3
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV CREDITS

Special Topics in Physics

COURSE DESCRIPTIVE TITLE

CALENDAR DESCRIPTION:

This class allows for students to study a topic in physics which is not included within the current course offerings of the department. Different topics will be identified by adding a letter to the course number, e.g. 408C, 408D. Interested students should contact the head of the Department of Physics for more information.

PREREQUISITES: 6 credits of PHYS 300 or above, and permission of the instructor
COREQUISITES:
PRE or COREQUISITES:

SYNONYMOUS COURSE(S):
(a) Replaces:
(b) Cross-listed with:
(c) Cannot take: for further credit.

SERVICE COURSE TO: *(department/program)*

TOTAL HOURS PER TERM: **100**

STRUCTURE OF HOURS:

Lectures:		Hrs
Seminar:	**15**	Hrs
Laboratory:		Hrs
Field experience:		Hrs
Student directed learning:	**65**	Hrs
Other (specify): project	**20**	Hrs

TRAINING DAY-BASED INSTRUCTION:
Length of course:
Hours per day:

OTHER:
Maximum enrolment: **6**
Expected frequency of course offerings: by request
(every semester, annually, every other year, etc.)

WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)	☐ Yes	☐ No
WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)	☐ Yes	☒ No
TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:	☐ Yes	☒ No

Course designer(s):	**Derek Harnett**		
Department Head:	**Norm Taylor**	Date approved:	**May 11, 2009**
Supporting area consultation (UPACA1)		Date of meeting:	**May 29, 2009**
Curriculum Committee chair:	**Norm Taylor**	Date approved:	**May 29, 2009**
Dean/Associate VP:	**Dan Ryan**	Date approved:	**September 1, 2009**
Undergraduate Program Advisory Committee (UPAC) approval		Date of meeting:	**October 2, 2009**

LEARNING OUTCOMES:

Upon successful completion of this course, in a branch of physics not currently covered by the department's undergraduate curriculum, students will be able to:

- demonstrate advanced knowledge of the area, through discussions, seminars, and written presentations
- solve problems at a level typical of an upper-year physics course
- identify key sources of information for self-guided study in the area in question *i.e.* books, journal articles, online resources, etc.
- study independently
- prepare moderate length presentations or seminars in topics in physics
- deliver effective oral presentations in topics in physics
- prepare a major written document on a topic in physics

METHODS: *(Guest lecturers, presentations, online instruction, field trips, etc.)*

- directed reading
- oral presentations
- written project
- lectures or labs, if appropriate

METHODS OF OBTAINING PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

☐ Examination(s) ☐ Portfolio assessment ☐ Interview(s)

☐ Other (specify):

☒ PLAR cannot be awarded for this course for the following reason(s): Requires direct supervision

TEXTBOOKS, REFERENCES, MATERIALS:

[Textbook selection varies by instructor. An example of texts for this course might be:]

The availability of texts and other materials will depend to a great extent on the chosen topic.

SUPPLIES / MATERIALS:

- library
- online resources, such as the Los Alamos pre-print server or the SPIRES database

STUDENT EVALUATION:

[An example of student evaluation for this course might be:]

1. oral presentations 45%
2. written project 55%

COURSE CONTENT:

[Course content varies by instructor. An example of course content might be:]

The main purpose of this class is to allow students to study a branch of physics in which the department currently does not offer a course, possibly in preparation for graduate studies. Examples of such areas are astrophysics, atmospheric physics, biophysics, geophysics, oceanography, quantum field theory, string theory, photonics, and quantum computing. Specific course content will necessarily vary with the subject area, and each separate area will use a different letter attached to the course number.