University of Windsor
Program Development Committee

*5.20: **Physics - Summary of Minor Course and Calendar Changes**

Item for: **Information**

Forwarded by: **Science**

PART A

Please indicate with an "X" whether this change will be made to the undergraduate calendar or the graduate calendar, or both.	
_x__	The changes below, minor and largely editorial, will be made to the **Undergraduate Calendar**. These changes required no new resources.
__	The changes below, minor and largely editorial, will be made to the **Graduate Calendar**. These changes required no new resources.

When will these proposed change(s) be effective? [include semester and year]**:**	Fall 2014

PART B

Please list the course number and indicate with an "X" the changes that are being made. Add rows to the table as required. Full details on the proposed change(s) are to be provided in Part C.

Current course number	Deleting courses which are not part of any program's degree requirements*	Course calendar description changes	Pre/anti/co-requisite changes	Contact hour/ laboratory requirement changes	Course title changes	Renumbering courses	Cross-listing courses
03-64-141		x		x			
03-64-145		x		x			
03-64-131		x	x	x			
03-64-135		x	x	x			

If the deleted course was a required course in any program, the proposed deletion must be presented on a PDC Form C.

PART C

Please provide the current and the proposed new course information by cutting and pasting from the current undergraduate or graduate web calendar (www.uwindsor.ca/calendars) and clearly marking

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*deletions with strikethrough (~~strikethrough~~) and additions/new information with **underlining**.*

*For contact hour/laboratory requirement changes which do not always appear in the calendar, please type in the current information and clearly mark deletions with strikethrough (~~strikethrough~~) and additions/new information with **bolding and underlining**.*

Example: **03-101. University Senates** ~~**– Role and Power**~~ This course explores the history, role, and power of Senates in Canadian universities. ~~(Also offered as 04-101.)~~ (Prerequisite: 03-100.) ~~2 lecture hours and 1 tutorial hour per week~~ **3 lecture hours/week**

64-141: Introductory Physics II
Wave motion, sound, electricity and magnetism, light, and modern physics. (Prerequisite: 64-140 or 85-111.) (3 lecture hours per week, ~~2 tutorial hours every other week, 3 laboratory hours every other week.~~ **1 tutorial hour and 2 laboratory hours every week.**) Antirequisites: 64-145, 64-131, 64-135) Open to students in Engineering, Human Kinetics, Forensic Science, Bachelor of Arts and Science, and all programs within in the Faculty of Science; exceptions only with the permission of the Head or designate.

64-145: Introductory Physics II (B)*
Wave motion, sound, electricity and magnetism, light, and modern physics. This is a no-lab version of 64-141. Students in the Faculty of Science can use the course to fulfill option requirements - but not their major requirements. (Prerequisite: 64-140, 64-144, or 85-111.) (3 lecture **hours** ~~, 2 tutorial hours approximately every other week~~ **and 1 tutorial hour every week**.) Antirequisites: 64-141, 64-131, 64-135)*(*This is the "without lab" version of the course.)*

64-131: Introductory Physics for Life Sciences II
This course is a continuation of 64-134 intended for students interested in the biological or health sciences, or related disciplines. The topics covered include wave motion, sound, electricity and magnetism, light, and an introduction to topics in modern physics involving the life sciences such as the quantum nature of radiation and its interaction with biomolecules, high energy radiation and radioactivity, and the statistical treatment of data. (Prerequisite: 64-130 **or 64-140**.) (3 lecture hours per week, ~~2 tutorial hours every other week, 3 laboratory hours every other week.~~ **1 tutorial hour and 2 laboratory hours every week.**) Antirequisites: 64-135, 64-141, 64-145. Open to students in Human Kinetics, Forensic Science, Bachelor of Arts and Science, and all programs within in the Faculty of Science; exceptions only with the permission of the Head or designate.

64-135: Introductory Physics for Life Sciences II (B)*
This course is a continuation of 64-134 intended for students interested in the biological or health sciences, or related disciplines. The topics covered include wave motion, sound, electricity and magnetism, light, and an introduction to topics in modern physics involving the life sciences such as the quantum nature of radiation and its interaction with biomolecules, high energy radiation and radioactivity, and the statistical treatment of data. It is a no-lab version of 64-131. Students in the Faculty of Science can use the course to fulfill option requirements - but not their major requirements. (Prerequisite: 64-130 ~~or~~ **,** 64-134**, 64-140 or 64-144**.) (3 lecture **hours** ~~, 2 tutorial hours approximately every other week~~ **and 1 tutorial hour every week**.) Antirequisites: 64-131, 64-141, 64-145 *(*This is the "without lab" version of the course.)*

Rationale: These Calendar Changes document the change made to the structure of the Laboratory/Tutorial part of the course(s). Previously, the Laboratory and Tutorial were run on alternate weeks – one week Laboratory, and the next week Tutorial; the structure has been changed so that students do *one hour of Tutorial and two hours of Laboratory every week.* Note that the total number of contact hours has **not** changed; now, however, the Tutorials are able to stay on schedule with the lectures, which facilitates the students' learning.
Impacts students in Engineering, Human Kinetics, Forensic Science, Bachelor of Arts and Science, and all programs within in the Faculty of Science.

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Part D

Please indicate with an "X".	
Will the proposed changes result in changes to the learning outcomes of the course(s)?	
___	Yes. **If so, please complete the learning outcomes form and append new learning outcomes, as appropriate, to this Form E submission. (See attached for learning outcomes form))**
_x__	No.