壹、課程基本資料

<table>
<tr>
<td>課程名稱
Course Title</td>
<td colspan="4">生活中的物理(Physics in Life)</td>
</tr>
<tr>
<td>開課學制
School
System</td>
<td colspan="2">日間部 Day School
【 】專科部 5-Year Junior College
【 】二技部 2-Year College
【∨】四技部 4-Year College
【 】研究所 Graduate School</td>
<td colspan="2">進修部 Division of Continuing Ed.
【 】二專部 2-Year Junior College
【 】二技部 2-Year College
【 】四技部 4-Year College</td>
</tr>
<tr>
<td>開課單位
Department</td>
<td colspan="4">General Education Center</td>
</tr>
<tr>
<td>授課教師
Instructor</td>
<td colspan="2">Chiu-Hao Chen 陳秋豪</td>
<td>職稱
Position
Title</td>
<td>Assistant Professor
助理教授</td>
</tr>
<tr>
<td rowspan="3">師生互動
Instructor's
Contact
Information</td>
<td>辦公室
Office</td>
<td>Q912</td>
<td>辦公室電話
Office Phone
Number</td>
<td>7222</td>
</tr>
<tr>
<td>電子信箱
E-mail</td>
<td colspan="3">99626@wzu.edu.tw</td>
</tr>
<tr>
<td>約談時間
Office Hours</td>
<td colspan="3">週二 13:00～15:00 週五 10:00～12:00</td>
</tr>
<tr>
<td>學分
Credits</td>
<td colspan="2">2 學分</td>
<td>選課別
Category</td>
<td>【∨】必修 Required Course
【 】選修 Elective Course</td>
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<tr>
<td>開課類別
Course
Categories</td>
<td colspan="2">【 】學年課 For Academic Year
【∨】學期課 For Academic Semester</td>
<td colspan="2">開課年級 Year Taught：
授課班級 Class Taught：</td>
</tr>
<tr>
<td>科目概要
Course
Description</td>
<td colspan="4">本課程以文科背景學生為對象,將透過觀察日常生活中的物理現象,帶領同學探討其中的特性與原理,以啟發學生的科學觀念、養成學生的獨立思考能力與邏輯推理能力，並應用於生活當中。
This course introduces non-science majors to applications of physics in life through observations. Students will be guided to investigate the concepts of physics so as to inspire their scientific ideas, independent thinking, and logical reasoning abilities.</td>
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課程目標 Course Objectives	透過觀察與探索日常生活中的物理現象： 　　1. 使學生了解自然現象背後的物理觀念與意義(知識) 　　2. 將物理的理論應用於生活上，解決生活中的問題(技能) 　　3. 培養做是具有邏輯推理的科學態度(態度) 　　1. To understand the concept of physics. 　　2. To acquire problem solving skills with the application of theories of physics. 　　3. To develop scientific attitudes through logical reasoning.
評量方式與評分比例分配 Evaluation Criteria	1. Attendance 10% 2. Quiz 30% 3. Midterm Exam 30% 4. Final Report and Presentation 30% (**Each counts 15%, everyone has to turn in your own report, any copies from your group-mate is not allowed, all paper reports must be handed in by January/7th 5PM. Late reports will be taken 50 pts off**.)
課堂要求 Course Requirements & Policies	1. Students are required to attend all the classes on time and abide by all the classroom regulations of the college. Any sort of leave should be made beforehand and sick leave should be made on the day, before class starts, with e-mail or phone call. The document should be signed along with a copy of prescription (or evidence signed by any relevant personnel) on the day when students return to school. 2. Students are not allowed to take any makeup test for any absence; Students are not permitted to use cellular phone in class; Students are not allowed to bring drink or food in the computer lab; Students are regarded "ABSENT" if they are late by 10 minutes, unless a prior arrangement has been made. There are no make-up tests. If students have more than 8 unexcused absences, their semester score will have 25 points deduction. Students are required to check their attendance status regularly and make any necessary correction within one week. 3. Plagiarism is strictly prohibited. Assignment of plagiarism will be graded zero. Plagiarism will also be punished on the basis of school rules.
教科書 Textbooks	No textbook is required. Course handout will be uploaded on E-learning
指定參考書目或網址 References	

貳、課程內容與進度（Course Content & Schedule）

上課日期 Date	單元名稱 Units	授課方式 Instructional Approaches	作業、報告、考 試或其他 Assignments, Tests and Others	備註 Remarks
第一週	上課方式與課程內容簡介 Introduction to Physics	Lecture		
第二週	Laws of Motion	Lecture		
第三週	Friction and Centripetal force	Lecture	Quiz	
第四週	Torque and Rotational Motions	Lecture	Quiz	
第五週	Work and Energy	Lecture	Quiz	
第六週	Fluid Mechanics	Lecture	Quiz	
第七週	Thermodynamics	Lecture	Quiz	
第八週	Review for Midterm Exam	Lecture		
第九週	**Midterm Exam**	**Exam**	**Paper-Based**	
第十週	Electricity and Discussion for the final project	Lecture	Quiz	
第十一週	Electricity and Magnetism	Lecture	Quiz	
第十二週	Waves	Lecture	Quiz	
第十三週	Light and Optics	Lecture	Quiz	
第十四週	Preparation for the final project	Lecture		
第十五週	Quantum Mechanics	Lecture	Quiz	
第十六週	Atomic Mechanics	Lecture		
第十七週	Final presentations	Lecture		
第十八週	Final Presentations	Lecture		