Florida Institute of Technology

ADDING A NEW COURSE TO THE CURRICULUM

This course is available for student registration only after the approval process has been completed.

SUBJECT: PHY (e.g., CSE) COURSE NO.: 1999 (e.g., 1301) CREDIT HOURS: 4 TERM TO BE ADDED TO THE FILE: Fall 2010 (e.g., Fall 2010)

CLASS HOURS: 60/semester LECTURE HOURS: 60/semester LAB HOURS: 0 CONTACT HOURS (CEU ONLY):

DEPARTMENT: Physics and Space Sciences (e.g., Computer Sciences) SCHEDULE TYPE: Lecture (A) (e.g., Lecture, Lab or Special Topics/Project)

☐ COLLEGE OF AERONAUTICS – 23 ☐ COLLEGE OF PSYCHOLOGY AND LIBERAL ARTS – 25
☐ NATHAN M. BISK COLLEGE OF BUSINESS – 24 ☐ COLLEGE OF SCIENCE – 26
☐ COLLEGE OF ENGINEERING – 1 ☐ EXTENDED STUDIES DIVISION / NATHAN M. BISK COLLEGE OF BUSINESS – 90

COMPUTER TITLE: Restricted to 25 characters, including spaces Physical Concepts

CATALOG TITLE: Physical Concepts for Construction

CATALOG DESCRIPTION OF COURSE: Restricted to 350 characters, including spaces

Presents the basic concepts of physics as an essential foundation for understanding technical ideas such as statics, structures, materials, and electrical and mechanical systems. This course provides a basis in physical science required for field work in the construction industry.

In addition, please attach a course syllabus and/or more detailed description.

GRADES TO BE ISSUED
 powdered A, B, C, D, F
 ☑ A, B, C, D, F, CEU
 ☑ CEU
 ☑ S, U
 ☑ P, F
 ☑ Other

ADDITIONAL RESTRICTION: (e.g., Major, Class Level, Department Head Approval)

If this course replaces a course currently offered in BANNER, please indicate old course information and the date/term the course may be removed from the system.

SUBJECT: Alpha Prefix (e.g., CSE) COURSE NO. (e.g., 1301)

APPROVALS: Upon completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for approval below and forward to Catalog Director.

R. Locurcio
Originator

T. Oswalt
Department Head/Program Chair

H. R. Rowling
Dean or Associate Dean

Date

Date

Date

Date

4/22/10

4/23/10

Chair, Graduate Council

Chair, Undergraduate Curriculum Committee

4/23/10

4/23/10

CATALOG DIRECTOR

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SCAPREQ: 

SCARRES: 
Operator Init.: 
Date:

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ROR:029-409

Dean's Office
SYLLABUS

PHY1999/Physical Concepts for Construction

Instructor: B. Sawyer
Office-Room 235PS; phone: 674-7355
Office email: bsawyer@fit.edu
Office hours: 2:00-5:00pm

Text: Fundamentals of Physics, 7th ed. By Halliday, Resnick, and Walker

General Information:

(1) Course meets concurrently with PHY 1001, Sec 05. Construction students will not be graded on materials that require knowledge of Calculus 2.

(2) FI Tech policy requires that you attend every class.

(3) The material that we hope to cover is indicated by chapter and section on the next page. The sections enclosed by ( ) should be read. These sections may be covered at the discretion of the instructor.

(4) Homework (to be turned in) will either be selected from the problem set at the end of each chapter in your textbook or be written by me and provided as a handout. Please consider working additional problems in order to improve your problem solving skills!!!!!!!

(5) YOUR GRADE WILL BE DETERMINED BY:
a. Midterm Exam 1 = 100points
b. Midterm Exam 2 = 100points
c. Final Exam = 200points
d. Homework = 50points

(6) NOTES:
a. NO (undocumented) EXCUSES WILL BE ACCEPTED FOR MISSING AN EXAM.
b. Exam Dates (*):
   Exam 1:
   Exam 2:
   Final Exam:
   Note: (*) Dates are subject to change; Room:

TBA

COS Dean’s Office
### ORDER IN WHICH MATERIAL WILL BE COVERED

**PHY1999/Physical Concepts for Construction**  
**Fall 2010**

#### PART I: MECHANICS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
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<tr>
<td>5</td>
<td>Force and Motion I – (general discussion)</td>
<td>1 – 8</td>
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<tr>
<td>13</td>
<td>Gravitation – (force, weight, and acceleration)</td>
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<tr>
<td>5</td>
<td>Force and Motion II – (applications/examples)</td>
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<tr>
<td>6</td>
<td>Force and Motion II</td>
<td>1 – 3, (4), 5</td>
</tr>
<tr>
<td>2</td>
<td>Motion Along a Straight Line – (example)</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Motion in Two and Three Dimensions – (example)</td>
<td>5 – 7</td>
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<tr>
<td>13</td>
<td>Gravitation – (satellites)</td>
<td>approx. 7,8</td>
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<tr>
<td>7</td>
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<td>8</td>
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</tr>
<tr>
<td>13</td>
<td>Gravitation – (potential energy)</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
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<td>10</td>
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<tr>
<td>11</td>
<td>Rolling, Torque, and Angular Momentum</td>
<td>(1 – 5), 6 – 11, (12)</td>
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<td>12</td>
<td>Equilibrium and Elasticity</td>
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<td>15</td>
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<td>Fluids</td>
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</tr>
</tbody>
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#### PART II: THERMODYNAMICS

(if time allows)

<table>
<thead>
<tr>
<th>CHAPTER</th>
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</table>
The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Science  DEPARTMENT: Physics and Space Sciences

REQUEST IS FOR CHANGE IN COURSE: PHY 2091

Number: Course Title: Physics Laboratory 1

TO BE INCLUDED IN 2010/2011 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR FALL 2010 TERM

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE? Yes ☐ No ☒ If yes, current credits _______ requested credits _______

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE? Yes ☒ No ☐ If yes, please check all that apply:

☐ Add ☐ Remove ☐ Prerequisite ☒ Corequisite ☐ Add ☐ Remove ☐ Prerequisite ☐ Corequisite ☐ Add ☐ Remove ☐ Prerequisite ☐ Corequisite ☐ Add ☐ Remove ☐ Other Restrictions ☐ Yes ☐ No

if yes, please list below:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

APPROVALS: Upon completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for approval below and forward to Catalog Director.

1) ___________________ 4/22/10
   Originator: Date

2) ___________________ 4/22/10
   Department Head/Program Chair: Date

3) ___________________ 4/23/10
   Dean or Associate Dean: Date

4) ___________________ Date
   Chair, Graduate Council

OR

______________________ Date
   Chair, Undergraduate Curriculum Committee

CATALOG DIRECTOR’S USE ONLY

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SCABASE _______ SCARRES _______ Operator Initials _______ Date _______

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The addition or removal of any graduation requirement in a major or minor requires that this form, accompanied by supporting documentation, be completed and approved as indicated below. Incomplete or incorrect forms will not be processed.

**Florida Institute of Technology**

**CHANGING GRADUATION REQUIREMENTS IN A MAJOR/MINOR**

**COLLEGE** College of Science

**DEPARTMENT** Physics and Space Sciences

**DEGREE LEVEL** B.S.

**PROGRAM TITLE** Astronomy and Astrophysics

**TO BE INITIATED WITH CATALOG YEAR** 20_11_20_12

**CHANGE REQUESTED FOR** X major program □ minor program

**EFFECTIVE DATE FOR CHANGE** 4/23_10

**NAMED TERM FOR EFFECTIVE DATE** Fall Semester

**Month/Day/Year (Required)**

**Major/Minor Code** 7136

**BRIEF DESCRIPTION OF REQUESTED CHANGES** Attach a more detailed description and any supporting documentation

Replace MTH 3201 "Boundary Value Problems" with MTH 3210 "Partial Differential Equations with Applications in Science and Engineering" (changed offering by Math department)

This course is usually taken in Spring of Junior Year by 7136 majors.

**Approvers:** On completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee, for approval below and forward to the Office of the Registrar

**Elaine Carlyle**

**Date** 4/23/10

**Chair, Graduate Council**

**Date**

**OR**

**Department Head / Major Program Chair**

**Date**

**Chair, Undergraduate Curriculum Committee**

**Date**

**Dean or Associate Dean**

**Date**

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  - Academic Year
  - Update completed
  - Initials

- Extended Studies Division Catalog
  - Academic Year
  - Update completed
  - Initials

- University Alliance Catalog
  - Academic Year
  - Update completed
  - Initials

- CAPP / Degree Evaluation
  - Academic Year
  - Update completed
  - Initials

- Catalog / Policy Mgmt. System
  - Academic Year
  - Update completed
  - Initials

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**RGR-0031989**
The addition or removal of any graduation requirement in a major or minor requires that this form, accompanied by supporting documentation, be completed and approved as indicated below. Incomplete or incorrect forms will not be processed.

COLLEGE: College of Science

DEPARTMENT: Physics and Space Sciences

DEGREE LEVEL: B.S.

PROGRAM TITLE: Pre-Professional Physics

TO BE INITIATED WITH CATALOG YEAR: 2011/2012

CHANGE REQUESTED FOR: x major program  □ minor program

EFFECTIVE DATE FOR CHANGE: 4/23/10

NAMED TERM FOR EFFECTIVE DATE: Fall Semester

Major/Minor Code: 7135

Term MUST be named, i.e., UA-Fall 2, Fall Semester-Main Campus

BRIEF DESCRIPTION OF REQUESTED CHANGES: Attach a more detailed description and any supporting documentation

replace MTH 3201 "Boundary Value Problems" with MTH 3210 "Partial Differential Equations with Applications in Science and Engineering" (changed offering by Math department)

This course is usually taken in Fall of Junior Year by 7135 majors.

Approvals: On completion of appropriate department approvals, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee, for approval below and forward to the Office of the Registrar

Original: Elaine Carle

Date: 4/23/10

Department Head / Major Program Chair: Larry Oliver

Date: 4/23/10

OR

Department Head / Minor Program Chair: Dean or Associate Dean

Date: 

Chair, Graduate Council: 

Date: 

Chair, Undergraduate Curriculum Committee: 

Date: 

REGISTRAR'S USE ONLY

University Catalog: 

☐ Yes ☐ No Update completed ________________ Date ________________ Initials ________________

Extended Studies Division Catalog: 

☐ Yes ☐ No Update completed ________________ Date ________________ Initials ________________

University Alliance Catalog: 

☐ Yes ☐ No Update completed ________________ Date ________________ Initials ________________

CAPP / Degree Evaluation: 

☐ Yes ☐ No Update completed ________________ Date ________________ Initials ________________

Catalog / Policy Mgmt. System: 

☐ Yes ☐ No Update completed ________________ Date ________________ Initials ________________

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RGR-068-1199
Florida Institute of Technology

CHANGING GRADUATION REQUIREMENTS IN A MAJOR/MINOR

The addition or removal of any graduation requirement in a major or minor requires that this form, accompanied by supporting documentation, be completed and approved as indicated below. Incomplete or incorrect forms will not be processed.

COLLEGE College of Science

DEPARTMENT Physics and Space Sciences

DEGREE LEVEL B.S

PROGRAM TITLE Physics

TO BE INITIATED WITH CATALOG YEAR 2011 

CHANGE REQUESTED FOR major program minor program Major/Minor Code

EFFECTIVE DATE FOR CHANGE 4/23/10

NAMED TERM FOR EFFECTIVE DATE Fall Semester

Month/Day/Year (Required)

TERM MUST be named, i.e., UA-Fall, Fall Semester-Main Campus

BRIEF DESCRIPTION OF REQUESTED CHANGES Attach a more detailed description and any supporting documentation

replace MTH 3201 "Boundary Value Problems" with MTH 3210 "Partial Differential Equations with Applications in Science and Engineering" (changed offering by Math department)

This course is usually taken in Spring of Junior Year by 7101 majors.

Elaine Carlyle 4/23/10

Chair, Graduate Council

Date

OR

Chair, Undergraduate Curriculum Committee

Date

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University Catalog

☑ Yes ☐ No Update completed Date Initials

☑ Yes ☐ No Update completed Date Initials

☑ Yes ☐ No Update completed Date Initials

☑ Yes ☐ No Update completed Date Initials

☑ Yes ☐ No Update completed Date Initials

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RGR-0834199
更换学业要求

学院: College of Science  
专业: Physics and Space Sciences

学位水平: B.S.  
项目名称: Solar, Earth and Planetary Sciences

要启动的学年: 2011/12  
变更请求: ☑ 主专业 ☐ 次专业  7138  
有效日期: 4/23/10  
命名的日期: 秋季学期  

简要描述请求的变更: 

替换 MTH 3201 "边界值问题" 为 MTH 3200 "科学与工程中的偏微分方程" (课程变更由数学系决定)

此课程通常在大三学年开始，由 7138 名学生选修。

审批: 完成适当的部门审批后，将表格提交给院长或院长委员会，以供批准，并在办公桌的注册办公室。

Elaine Carlyle 4/23/10  
主管 / 项目主管: 4/23/10

Dean or Associate Dean 4/23/10

大学目录  
扩展研究目录  
大学联盟目录  
CAPP / 学位评估  
目录 / 政策管理系统

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