

Undergraduate Distance Education Course Approval Form

(Required for all courses taught by distance education
for more than one-third of teaching contract hours)

Existing Course Approval

FEB - 3 2000

Course: PY 112, General Physics II

Contact Person: Dr. V. Wijekumar Phone 4588 E-mail VJWLJE

Department: Physics

Approvals (signature and date)

  1/31/00
College Dean Department Chair



Department Curriculum Committee

Send this form and the questionnaire to the Dean of the School of Continuing Education for distribution to other offices. No further approval is required

LSC Use Only

Number: _____

Submission Date: _____

Action Date: _____

UWCC Use Only

Number: _____

Submission Date: _____

Action Date: _____

New Course Approval

Course: _____

Contact Person: _____ Phone _____ E-mail _____

Department: _____

Approvals (signature and date)

Department Curriculum Committee

Department Chair

College Curriculum Committee

College Dean

Director of Liberal Studies
(where applicable)

Provost
(where applicable)

Distance Education Course Approval Questionnaire

Course: PY 112 Physics II Lecture

3.0 credit hours

Instructor of Record: V. Wijekumar

Whenever distance education technologies (as defined in Article 42, Section A, 1 of CBA) are used for more than one-third of teaching contact hours of a course, the academic department must review the course format and indicate the approval. Criteria used are listed under Article 42, Section B, 2.

- 1. Will a qualified instructor teach the course?**
Dr. V. Wijekumar has taught general physics courses for over 20 years in the traditional class room setup. He has recently also developed and taught two distance education courses for second certification in physics for high school science and mathematics teachers using World Wide Web.
- 2. Will the technology serve as a suitable substitute for the traditional classroom?**
Yes. In addition to using standard class materials on the WWW, students will have access to additional supplementary materials developed by the instructor and unlimited access class materials developed by other physics faculty who posted their class materials on the WWW.
- 3. Are there suitable opportunities for interaction between the instructor and the student?**
Yes. The students will have at least 2 hours each week day during summer session to call the faculty member for help over the phone. In addition there will be bulletin board and/or chat room to communicate during week days.
- 4. Will there be suitable methods used to evaluate student achievement?**
Yes. There will be 15 on-line quizzes and 15 homework assignments, one midterm exam, and one final exam for course.
- 5. Describe the evaluation methods to be used.**
The quizzes and homework assignments are 50% of the final grade. The midterm is 20% of the final grade and the final exam is 30 % of the final grade. The midterm and the final exam will be taken in class at IUP.

Distance Education Course Approval Questionnaire

Course: PY 112, Physics II Lecture

3.0 credit hours

Instructor of Record: V. Wijekumar

This course follows the same format and text as PY 111, and therefore this document is not changed.

Whenever distance education technologies (as defined in Article 42, Section A, 1 of CBA) are used for more than one-third of teaching contact hours of a course, the academic department must review the course format and indicate the approval. Criteria used are listed under Article 42, Section B, 2.

1. Will a qualified instructor teach the course?

Dr. V. Wijekumar has taught general physics courses for over 20 years in the traditional class room setup. He has recently also developed and taught two distance education courses for second certification in physics for high school science and mathematics teachers using World Wide Web.

2. Will the technology serve as a suitable substitute for the traditional classroom?

Yes. In addition to using standard class materials on the WWW, students will have access to additional supplementary materials developed by the instructor and unlimited access to class materials developed by other physics faculty who posted their class materials on the WWW.

The textbook chosen by the instructor also includes a CD-ROM and an Online Learning Center (OLC) with resources for students and instructors. The CD-ROM and the OLC include the following for each chapter:

- Useful Concepts
- Important terms
- Chapter Web Links (online references and online quizzes with feedback)
- Simulations
- Worked Examples
- Practice Problems with feedback
- Important Terms Quiz
- Study Questions to meet the objectives of the content
- 3 to 6 minute video clips (~ 24) to show Physics in action

The students will also have the opportunity to see and hear the instructions using streaming video at their desktops using Rotorplayer or Quickcam.

The techniques incorporated in these learning modules use the most current instructional technologies in their most effective form. They provide motivational elements, subject information (concepts, procedures, analysis, synthesis skills) in meaningful formats like concept maps, practice in problem solving, and real-life examples for students to relate to the information. Collaborative learning experiences are built into the bulletin board features eliciting knowledge from individual learners and building a knowledge base for the class.

3. Are there suitable opportunities for interaction between the instructor and the student?
Yes. The students will have at least 2 hours each week-day during summer session to call the faculty member for help over the phone. In addition there will be a bulletin board and a chat room available for communication.
4. Will there be suitable methods used to evaluate student achievement?
Yes. There will be 15 on-line quizzes and 15 homework assignments, one midterm exam, and one final exam for course.
5. Describe the evaluation methods to be used.
The quizzes and homework assignments are 50% of the final grade. The online quizzes will provide instant feedback to the students about their progress. The homework assignments are submitted via email because of the complexity in notations. The midterm is 20% of the final grade and the final exam is 30 % of the final grade. The midterm and the final exam will be taken in class at IUP.