The course introduces the students to the phenomena associated with heat and its effect on materials and phase transformations. This course also studies the mechanism of heat transfer and microscopic description.

- The course is designed to help student-teachers achieve the following goal:
  Study of heat phenomena and its effect on materials and fundamental physical quantities in thermal systems

The student have to recognize the following:

- Concept of heat as a form of energy together with concept of temperature and its measurements.

  ب) المهارات العقلية:

- Basic postulate of kinetic theory of gases are successful in microscope description of gas properties.

  ج) المهارات العملية:

- Effect of heat on different materials and the mechanisms of heat transfer through them.

(د) المهارات العامة والمنقولة:
- Construct new knowledge for themselves through research, reading and discussion, and reflect in an informed way on the role of science in human affairs.

- Create and maintain an educational environment in which conceptual understanding will occur for all science students.

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<table>
<thead>
<tr>
<th>أسلوب التعليم والتعلم</th>
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<tbody>
<tr>
<td>Solves and discusses problem sets.</td>
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<tr>
<td>Submission and class presentation of term papers.</td>
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<td>Computer aided and web based assignments and assessment.</td>
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• Problems and essay assignments.

 jewellery

أساليب التقييم

1. الاختبارات العملية؛ تقييم الأداء العملي للطلاب

2. الاختبارات التحريرية؛ تقييم التحصيل والأداء الكتابي للطلاب.

- Semester activities including classroom interactions and Quizzes.
- Mid-term exam
- Lab performance evaluation.
- Oral exam.
- Final exam.

Summative Evaluation table

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<thead>
<tr>
<th>Assessment</th>
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<tbody>
<tr>
<td>1. Midterm exam</td>
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<td>2. Final written exam</td>
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<td>3. Final practical exam</td>
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<td>Total</td>
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License Plate

Section 1. Course Name

Section 2. Course Code

Section 3. Course Coordinator

Section 4. Course Description

Section 5. Course Objectives

Section 6. Course Outcomes

Section 7. Course Materials

- Physics for scientists and Engineers by R. Serway & R. Beichner.

Section 8. Course Schedule

Section 9. Grading Policy

Section 10. Grading Criteria

Section 11. Attendance Policy

Section 12. Assessment Schedule

Section 13. Final Exam

Section 14. Mid-term Exam

Section 15. Quizzes

Section 16. Lab Performance Evaluation

Section 17. Oral Exam

Section 18. Final Written Exam

Section 19. Final Practical Exam

Section 20. Assignments

Section 21. Course Evaluation

Section 22. Course Feedback

Section 23. Course Improvement

Section 24. Course Conclusion

Section 25. Course References

Section 26. Course Resources

Section 27. Course Resources

Section 28. Course Resources

Section 29. Course Resources

Section 30. Course Resources

Section 31. Course Resources

Section 32. Course Resources

Section 33. Course Resources

Section 34. Course Resources

Section 35. Course Resources

Section 36. Course Resources

Section 37. Course Resources

Section 38. Course Resources

Section 39. Course Resources

Section 40. Course Resources
- "Physics Principles with applications", D.C Giancoli, USA..
- "University physics", F.W. Sears, M.W. Zemasky and H.D. Young, Wesley series in physics, USA

(2) مجلات علمية، ومواقع الإنترنت

************

الإمكانات المطلوبة للتعليم والتعلم

- References
- Chemistry library
- Textbooks
- Handouts and problem sets.
- Electronic, web, and multimedia based resources.
- Lab work.

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منسق المقرر: د. المغربي محمد المغربي
رئيس القسم: د. المغربي محمد المغربي
التاريخ: 15/5/2008م