



جامعة الملك عبدالعزيز
KING ABDULAZIZ UNIVERSITY

PHYS 701

KAU

Faculty of Science

Department of Physics

Course Teacher

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المكتب

مبنى ١١٥ غرفة رقم ٢٦٥

Office

Building 115 Room 265



Office Hours

Day	Office Hours
SUN	الساعات المكتبية تجدها في موقعي الإلكتروني التالي: You can find my office hours in my following website: https://msalghamdi.kau.edu.sa/
MON	
TUS	
WED	
THU	
E-mail	msalghamdi@kau.edu.sa malfarha@gmail.com (للتواصل)



Website

<https://msalghamdi.kau.edu.sa/>



المقررات الدراسية

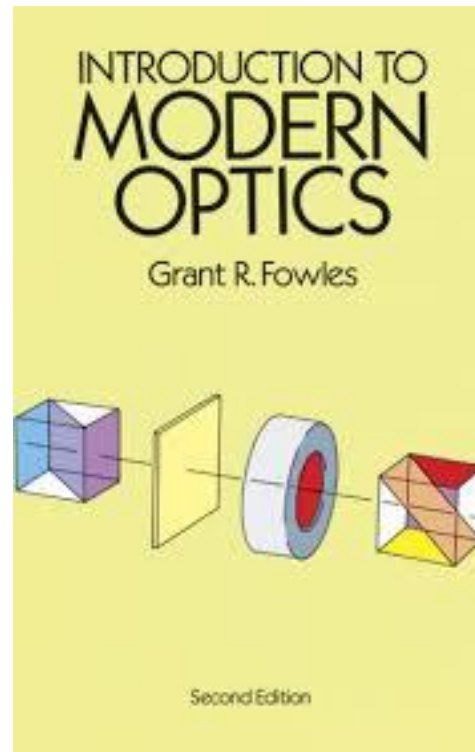


فيزياء 701



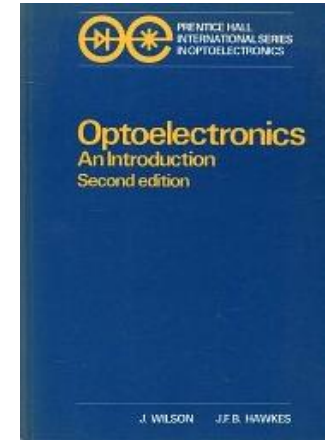
Study Books

- **Introduction to Modern Optics**, Grant R. Fowles, Second Edition, New York, 1975.



References

- **Optoelectronics: An Introduction**, J. Wilson and J.B. Hawkes, Prentice Hall, London, 1998.

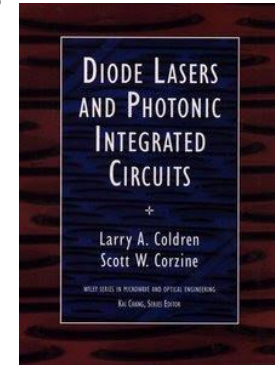


- **Lasers**, A. E. Siegman, University Science Books, California, 1986.

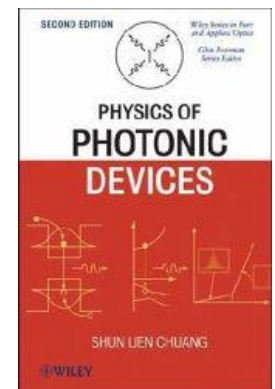


References

- Diode lasers and photonic integrated circuits, Coldren and Corzine, Wiley 1995.



- Physics of Photonic Devices, Chuang, Wiley 1995.



Contents

- Ch.1: The Propagation of Light
- Ch.2: The Vectorial Nature of Light
- Ch.3: Coherence and Interference
- Ch.4: Diffraction
- Ch.5: Optics of Solids
- Ch.6: Amplification of Light. Lasers
- Ch.7: Ray Optics



Marks Distribution

▪ Home Work	10
▪ Essay	20
▪ Mid Term Exam	30
▪ Final Exam	40

▪ Total	100



How to do the Essay

1) Chose one subject form the following:

- The Propagation of Light
- Coherence and Interference
- Diffraction
- Optics of Solids
- Amplification of Light. Lasers



How to do the Essay

- 2) Determine 3 - 5 keywords from this subject.
- 3) Look for 5 - 8 published research around this subject.
- 4) Use these published research to write the essay.
- 5) Write a summary about all the research you have found.
- 6) Use your one way to write the essay.

