Last update: 22-07-2019

220228 - Chemical Technology

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 713 - EQ - Department of Chemical Engineering
Academic year: 2019
Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Teaching unit Optional)
ECTS credits: 3 Teaching languages: Catalan

Teaching staff

Coordinator:

Daga Monmany, Jose Maria

Others: Cortes Izquierdo, M. Pilar

Learning objectives of the subject

At the end of the course the student should:
- Understand the laws that govern the behavior of solutions
- Understand aspects of the chemistry of metals and non-metals
- To acquire knowledge of aspects of organic chemistry in its application in the field of polymers

Study load

Total learning time: 75h	Hours large group:	27h	36.00%
	Self study:	48h	64.00%

Last update: 22-07-2019

220228 - Chemical Technology

Content

title english	Learning time: 32h Theory classes: 12h Self study : 20h
Description: content english	

title english	Learning time: 15h Theory classes: 5h Self study : 10h
Description: content english	

title english	Learning time: 28h Theory classes: 10h Self study : 18h
Description: content english	

Last update: 22-07-2019

220228 - Chemical Technology

Planning of activities

name english	Hours: 43h Theory classes: 16h Self study: 27h

name english	Hours: 19h Theory classes: 7h Self study: 12h

name english	Hours: 4h 30m Theory classes: 1h 30m Self study: 3h

name english	Hours: 2h Theory classes: 2h

name english	Hours: 9h Theory classes: 3h Self study: 6h

name english	Hours: 2h Theory classes: 2h

Last update: 22-07-2019

220228 - Chemical Technology

Bibliography

Basic:

Whitten, K. W.; Davis, R. E.; Peck, M. L. Química general. 5a ed. Madrid [etc.]: McGraw-Hill, 1998. ISBN 8448113861.

Chang, R. Química. 10a ed. México [etc.]: McGraw-Hill, 2010. ISBN 9786071503077.

Flaqué Lajara, C. [et al.]. Química per a l'enginyeria [on line]. 2a ed. Barcelona: Iniciativa Digital Politècnica, Publicacions Acadèmiques UPC, 2011 [Consultation: 01/07/2016]. Available on: <http://hdl.handle.net/2117/76257>. ISBN 9788476535998.

Petrucci, Ralph H. Química general: principios y aplicaciones modernas [on line]. Undécima edición. Madrid: Pearson Prentice Hall, 2017 [Consultation: 04/10/2018]. Available on: <http://www.ingebook.com/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=6751>. ISBN 9788490355336.

Complementary:

Atkins, P. W.; Jones, L. Principios de química: los caminos del descubrimiento. 5a ed. Buenos Aires: Médica Panamericana, cop. 2012. ISBN 9789500602822.

Carey, Francis A. Organic chemistry. 2nd ed. New York: McGraw-Hill, cop. 1992. ISBN 0070099340.

Solomons, T. W. [et al.]. Química orgánica. 2a ed. México: Limusa : Wiley, cop. 1999. ISBN 9681852176.

Sales i Cabré, J.; Vilarrasa i Llorens, J. Introducció a la nomenclatura química: inorgànica i orgànica. Barcelona: EUNIBAR, 1984. ISBN 848525774X.

Others resources:

http://highered.mcgraw-hill.com/sites/0072828374/student_view0/index
http://www.chemdex.org
http://www.webelements.com
http://www.periodicvideos.com/#
http://www.khanacademy.org/#chemistry-1
http://en.wikibooks.org/wiki/General_Chemistry