1. At the time of the last CPT guidelines revision (2008), PolyEd requested that Polymer Chemistry be included as a foundational course. CPT declined to do this. How important is it to you, an active member of the polymer community, that such a foundational course on polymers be included in the undergraduate chemistry curriculum?

	Which of the following categories best describes your employment status?			
	Industry/government lab	**Academia**	**Student**	**Response Totals**
Very important	**68.9% (42)**	**50.7% (36)**	**50.0% (1)**	**59.0% (79)**
Important	23.0% (14)	32.4% (23)	**50.0% (1)**	28.4% (38)
Unimportant	8.2% (5)	16.9% (12)	0.0% (0)	12.7% (17)
answered question	61	71	2	**134**
			skipped question	**1**

2. The CPT did include a guideline statement that “students should be exposed to the principles of macromolecules across foundational areas”. Because this is a “should” rather than a “must” statement, it is advisory only and is not enforced by CPT in the review of programs. In your opinion, how important is it that the "should" be changed to a "must"?

	Which of the following categories best describes your employment status?			
	Industry/government lab	**Academia**	**Student**	**Response Totals**
Very important	**60.7% (37)**	**66.2% (47)**	**50.0% (1)**	**63.4% (85)**
Important	31.1% (19)	25.4% (18)	**50.0% (1)**	28.4% (38)
Unimportant	8.2% (5)	8.5% (6)	0.0% (0)	8.2% (11)
answered question	61	71	2	**134**
			skipped question	**1**

3. In your opinion, how important is it that institutions granting ACS certified degrees be required to include an introductory course on polymers as a choice for an in depth course?

	Which of the following categories best describes your employment status?			
	Industry/government lab	**Academia**	**Student**	**Response Totals**
Very important	**74.2% (46)**	**62.9% (44)**	**100.0% (2)**	**68.7% (92)**
Important	21.0% (13)	28.6% (20)	0.0% (0)	24.6% (33)
Unimportant	4.8% (3)	8.6% (6)	0.0% (0)	6.7% (9)
answered question	62	70	2	**134**
			skipped question	**1**

4. Do you have any other suggestions on ways to improve polymer education in the undergraduate chemistry curriculum?

	Which of the following categories best describes your employment status?			
	Industry/government lab	**Academia**	**Student**	**Response Count**
	22 replies	20 replies	1 reply	43
answered question	22	20	1	**43**
			skipped question	**92**

5. Which of the following categories best describes your employment status?

	Which of the following categories best describes your employment status?			
	Industry/government lab	**Academia**	**Student**	**Response Totals**
Industry/government lab	**100.0% (62)**	0.0% (0)	0.0% (0)	45.9% (62)
Academia	0.0% (0)	**100.0% (71)**	0.0% (0)	**52.6% (71)**
Student	0.0% (0)	0.0% (0)	**100.0% (2)**	1.5% (2)
Other (please specify)	0 replies	2 replies	0 replies	2
answered question	62	71	2	**135**
			skipped question	**0**

	Industry/government lab	Academia	Student	Response Text	
1		X		Provide access to more up-to-date polymer laboratory and curricular materials for undergraduate faculty through multi-media format	Apr 12, 2012 6:41 PM
2	X			I suspect that we are the only developed country which does not have polymer chemistry in the undergraduate curriculum. Delegating this only to engineering is a mistake.	Apr 12, 2012 7:19 PM
3		X		Stop trying to add materials to an overly burden chemistry curriculum. It does not require huge intellectual leaps to master concepts polymer science if one is already skilled in the art of chemistry.	Apr 12, 2012 7:23 PM
4		X		I prefer to see polymers be considered within existing courses rather than be a separate course. Polymer cocepts form good examples for priciples taught in conventional courses and should be included more.	Apr 12, 2012 7:29 PM
5	X			Teach it as an industrial chemistry course or elective.	Apr 12, 2012 7:55 PM

	Industry/ government lab	Academia	Student	Response Text	
6		X		A completely required course doesn't seem likely but more of an emphasis in each of the core classes seems more like a reality, at least in the near future.	Apr 12, 2012 7:57 PM
7		X		Incorporating more polymer concepts into the organic chemistry class	Apr 12, 2012 8:16 PM
8	X			I had lab classes in polymers - testing and physical properties, only. I would have liked a synthesis course as well. Polymer chemistry should be incorporated into the lab classes. When I interviewed for jobs, I was one of few who had polymer knowledge. If not for the significant exposure to polymer science as an undergraduate, I would have had fewer job offers.	Apr 12, 2012 8:17 PM
9		X		I would rather see strong fundamentals rather than a topical course.	Apr 12, 2012 8:24 PM
10		X		It is increasingly hard to cover all areas in a 4 year curriculum; perhaps it is time to offer it as an alternative to to an existing area such as Inorganic Chemistry?	Apr 12, 2012 8:26 PM
11	X			Increase the number of polymer chemists on university chemistry department faculties and increase their involvement with undergraduate course teaching..	Apr 12, 2012 9:02 PM
12		X		Like many things, it is best if someone who knows something about polymers teaches this course. Unfortunately, not every department will have someone qualified. Making this a must will help support them getting people trained in this area.	Apr 12, 2012 9:17 PM
13		X		Incorporate basic polymer science experiments into undergraduate chemistry lab curriculum.	Apr 12, 2012 9:25 PM
14		X		Polymer chemistry could be included as part of a biochemistry course, as a great deal of biochemistry is based on macromolecular chemistry.	Apr 12, 2012 9:26 PM
15	X			Incorporate some discussion of polymers in other courses. For example, discuss how a stretched rubber band will contract when heated as an example of entropy. Or talk about the use of organic reactions to make macromolecules such as polyamides. Etc.	Apr 12, 2012 10:56 PM
16	X			lab experments a CPT must	Apr 13, 2012 8:00 AM
17	X			lab experiments that emphasize that polymer molecular weights are average MWs, that there are usually a range of MWs in most polymer samples.	Apr 13, 2012 8:05 AM

	Industry/ government lab	Academia	Student	Response Text	
18	X			I got my BS in 1987. I never had a polymer class, but I've spent my career working in polymer science. Polymers HAVE to be included in today's curriculum.	Apr 13, 2012 8:18 AM
19	X			I would be very appropriate to encourage college text authors to include sections emphasizing polymer issues. A couple examples: in physical chemistry, discuss polymers related to solubility/phase behavior; in analytical chemistry, add characterization by size exclusion chromatography and mass spectroscopy.	Apr 13, 2012 8:36 AM
20		X		Comment regarding item (3). Having polymer-related topics in the foundation and some of the in-depth courses might be a more workable option than requiring a polymer course.	Apr 13, 2012 9:29 AM
21	X			I think the polymer industry needs to reach out to the education "industry" and offer lecturers to general chemistry classes to introduce the concept of polymers. I did not know much about polymers before my graduate training in materials science.	Apr 13, 2012 9:48 AM
22		X		Expose students to the quality of life enhancements that polymers bring to society each and every day.	Apr 13, 2012 9:57 AM
23		X		Regarding polymer education: CPT should take a look around and determine how much polymeric materials they use in the course of a day and then decide whether or not Polymer Chemistry needs to be a required course or not. Dr. C. Scholz Professor of Chemistry	Apr 13, 2012 10:07 AM
24		X		Emphasis should be placed on the flexible natures of polymer chains. Their conformational preferences determine the size, shapes, and responses to stimuli. Use polymers to demonstrate some Thermodynamic principles. For example, rubber elasticity, in addition to ideal gases, as entropically controlled and melting temperatures of crystalline polymers visa vis melting enthalpy dominated by inrechain interactions and entropy of melting dominated by conformational entropy of isolated polymer chains.	Apr 13, 2012 10:43 AM
25	X			No, but I will add that the only reason I went into polymer science was because of a polymer chemistry course that was offered as one of the in-depth courses at my ACS certified undergraduate chemistry department.	Apr 13, 2012 10:44 AM

	Industry/ government lab	Academia	Student	Response Text	
26		X		Courses that have a general organic chemistry/polymer mix that focus more on future active ares like fuel cells, organic photovoltaics, ..etc; to get the undergrads more interested in the polymer science field.	Apr 13, 2012 12:45 PM
27		X		Make an introduction to polymers available for professors of chemistry as short courses, DVDs, etc.	Apr 13, 2012 12:46 PM
28		X		polymer physics and biopolymers can be more emphasized due to the practical value.	Apr 13, 2012 4:23 PM
29	X			Biomaterials must be included.	Apr 14, 2012 11:30 AM
30		X		This should have been done long ago. Most graduates,whether they seek employment after the B.S. degree or afetr and advanced degree, work in the polymer industry (we're only about 150 years behind the Europeans in this regard).	Apr 14, 2012 2:20 PM
31	X			One suggestion is to maintain a position of a separate, full polymer course, but start with recommended modules or units within existing foundational courses as well. A lab unit, clear definitions about key concepts, etc may provide mechanisms to increase representation over time. It may also be useful to gain explicit and coordinated support from industry because their needs (some not being met) are drivers for what the chemistry curriculum needs to include.	Apr 15, 2012 10:53 AM
32	X			Introductory organic chemistry should discuss polymers. A separate polymer chemistry course for undergraduates should not be required.	Apr 16, 2012 2:15 PM
33	X			Provide web-based learning for people interested in polymers.	Apr 16, 2012 9:29 PM
34	X			Polymer chemistry could easily be a 2 credit course with a lab or a lab-only course with group experiments 4-6 students vs, standard pairings. There are a tremendous number of short lab experiments that are illustrative and more 'fun' to see done than to hear about it.	Apr 23, 2012 3:30 PM
35	X			Incorporate relevant (practical) examples from industry	May 25, 2012 11:26 AM
36	X			Even a basic intro class would be helpful. All of the B.S. level scientist we hire typically have very little understanding of polymers at even a basic level. We have to teach them, which takes time and limits their ability to have impact early in the careers.	May 25, 2012 2:41 PM

	Industry/ government lab	Academia	Student	Response Text	
37	X			Laboratory courses for synthesis and characterizations of the polymers.Characterization would include for anlaytical MW, Tg, DMA and rheology and the extension of FTIR/NMR etc... Nice to have a formulation type option to the offerings that show how all chemicals potentially onteract from the cosmetic to drug reelase to a coating to solid compounding.	May 25, 2012 4:14 PM
38			X	Often polymer studies are tied in with the materials science and engineering program rather than the chemistry or chemical engineering departments. Chemistry students should be able to choose a polymer chemistry course that is offered in a different department as an in depth course. Communication between departments on campus is critical.	May 25, 2012 5:28 PM
39		X		The undergraduate curriculum is extremely crowded and any additions require removing content from other areas. While this is very important, the ACS should be very flexible with this requirement.	May 25, 2012 10:40 PM
40	X			Guidelines and "shoulds" don't get it done in a program if the resources are not there in this age of reduced funding. PolyEd may need to help by providing recommended class outlines, and by encouraging industry involvement in teaching selected sections. Rather than have one person tesch a 3 hr class, breaking it up into "modules" of industrial focus area (coatings, films, bio-polymers...) may yield more success. Also, few industrial partners have the time/permission to commit to a semester-long class.	May 29, 2012 8:47 AM
41	X			Follow model of "Polymer Chemistry of Everyday	May 29, 2012 1:22 PM
42	X			Increase laboratory experiments in organic chemistry on the synthesis and characterization of synthetic polymers	May 30, 2012 2:47 PM
43		X		I think it's more important that polymer sections or chapters be included across the chemistry curriculum as integrated parts of the whole.	Jun 3, 2012 6:47 AM

	Industry/ government lab	Academia	Student	Other (please specify)	
1		X		Dean, School of Natural Sciences and Mathematics	Apr 12, 2012 7:23 PM
2		X		retired professor	Apr 12, 2012 7:29 PM