

Spring 2016 Math 106L Syllabus
Textbook: Calculus (6th ed), by Hughes-Hallett, et al.

Day	Date	Section	Topic	Homework
1-2	13-Jan		Review of 105L Concepts	complete handout from class
Lab:	14-Jan		Trigonometry Basics	Cspk. p.71/1-13
1-3	15-Jan		Trig Identities and Important Limits	Cspk. p.75/1-7; 1.5/61-69; 1.7/32
2-1	18-Jan	<i>MLK Day</i>		
2-2	20-Jan	3.5	Differentiating Trig Functions	3.5/1,3,4,12-14,18,19,22,32,34,42,50,52,66
Lab:	21-Jan		Modeling with Trig Functions	
2-3	22-Jan	Cspk	Inverse Trig Functions	1.5/1-9,27-30; Cspk. p.77/1-5
3-1	25-Jan	3.6	Diff. Inverse Trig Functions	3.6/22,24,25,28,30,31,33,39,41,44,51; Chapter 3 Review/28
3-2	27-Jan		Trig Related Rates	3.5/29,31,59-61;4.2/13;4.3/36,43;4.6/44,45,50; Chapter 4 Review/63
Lab:	28-Jan		Newton's Laws of Motion	
3-3	29-Jan	6.3	Position, Velocity and Accel.	6.3/14,20,21,29-33; begin day 4-2 review
4-1	1-Feb		Gateway Test	Finish day 4-2 review problems
4-2	3-Feb		Review	1.5/10,13,15,17,18,21,28,31,32,36,38,51; Chapter 1 Review/22,23,33; 3.6/20; 3.7/21; Chapter 3 Review/15-18,20,25,32-37,42,47,55,66, 77,95(e),97,98,112; Cspk. 81/1-6
Lab:	4-Feb		Test 1	
4-3	5-Feb	11.1	What is a Differential Equation?	11.1/5,6,15,16,20,24; 11.5/1; 11.6/1; 11.7/1; Chapter 11 Review/1
5-1	8-Feb	5.1	Distance from Velocity	5.1/2-12,15,25,26,27
5-2	10-Feb	5.1	Left- and Right-Hand Sums	5.1/13,14,17-20; 5.2/3,4,37
Lab:	11-Feb		Sums and Sigma Notation	
5-3	12-Feb	5.2	Definite Integral	5.2/11-14,19,29-31,35,38,40,44
6-1	15-Feb		Catch Up Day	5.1/23; 5.2/40,42; Chapter 5 Review/5-7,18-22,40
6-2	17-Feb	5.3	FTC I	5.2/22,23,25,27,28,33; 6.2/51-60,65; Chapter 6 Review/28, 56-58
Lab:	18-Feb		Riemann Sums	Cspk. p.189/Exercises in parts I-IV;
6-3	19-Feb	5.3	Interpreting the Definite Integral	5.3/1-8,14,17,22-27,29
7-1	22-Feb	5.4	Thms about Definite Integrals	5.3/12; 5.4/1-5,13,15-19,28-31,36(a),37,38; Chapter 5 Review/29,30,32-36; Chapter 6 Review/1,2
7-2	24-Feb	6.2	Constructing Antiderivatives	6.2/1-3,5-8,11-14,26,27; Chapter 6 Review/6,8,13,16-18,20
Lab:	25-Feb	1.3	Average Value of a Function	
7-3	26-Feb	6.4	FTC II	6.4/4,7-15,22,24-26,35-37; Chapter 6 Review/73
8-1	29-Feb	7.1	Integration by Substitution	7.1/1,4,5,9,14,15,24,26,28,39,40,51,63,66,77,78; Chapter 7 Review/121
8-2	2-Mar	7.2	Integration by Parts	7.2/2-7,11,13,24,30,35,40,67;
Lab:	3-Mar		Quantities of Varying Density	
8-3	4-Mar	Cspk	Antidifferentiation Practice I	7.1/14,16,25,32,59,71,73; Chapter 7 Review/18-23; Begin day 9-2 review

9-1	7-Mar	Cspk	Antidifferentiation Practice II	7.1/34; Chapter 7 Review/50-58; Finish day 9-2 review
9-2	9-Mar		Review	5.3/26,37,38; 5.4/24,29,30,34; Chapter 5 Review/49,53; 6.1/6,11; 6.2/37-41,46,47,49; 6.2/67,75-77; Chapter 6 Review/21,25,30-35
Lab:	10-Mar		Test 2	
9-3	11-Mar		Catch Up Day	
10-1	14-Mar		<i>Spring Break</i>	
10-2	16-Mar		<i>Spring Break</i>	
Lab:	17-Mar		<i>Spring Break</i>	
10-3	18-Mar		<i>Spring Break</i>	
11-1	21-Mar	7.7	Integrating to Infinity	7.6/1(a),2,5,6,9-14,19,20,22,23,27,29-31,36;
11-2	23-Mar	7.7	Other Improper Integrals	7.6/1(b),7,15-18,21,24-26,32,33; Chapter 7 Review/140
Lab:	24-Mar	8.5	Force and Work	
11-3	25-Mar	8.5	Force and Work (filling tanks)	8.5/4-6,10-16,19,24,26
12-1	28-Mar	11.1	Differential Equations	Cspk. p.85/1-12; 11.1/1,5,16,22,24; 11.5/1; 11.6/1; Chapter 11 Review 1
12-2	30-Mar	11.2	Slope Fields	11.2/6,8,9,15,13,14,16,17,23; Chapter 11 Review/2
Lab:	31-Mar	11.3	Euler's Method	11.3/7,9,8,14,17
12-3	1-Apr	11.4	Separation of Variables	11.4/1,3,5,6,13,18,20-26,38; Begin day 13-2 review.
13-1	4-Apr	11.4	Separation of Variables	11.4/7,8,14-16,34-37,39,41; Finish day 13-2 review.
13-2	6-Apr		Review	Chapter 7 Review//51,56,71; 11.2/18; Chapter 11 Review/p.628/5-7,10,11,13,15,20,21,23,24,27,31
Lab:	7-Apr		Practice with Diff Eqs	
13-3	8-Apr		Test 3	
14-1	11-Apr	11.5	Growth and Decay, Stability	11.5/2,4,7,9,21,24,26,28; Chapter 11 Review/3,33,35
14-2	13-Apr	11.7	The Logistic Model	11.7/9-16,25,34; Chapter 11 Review/43,44
Lab:	14-Apr		Chemical Rate Equations	
14-3	15-Apr		Catch Up Day	
15-1	18-Apr		World Population Growth	Cspk. p.91 parts I-III; Start Day 15-3 review
15-2	20-Apr	11.6	Applications and Modeling	11.6/8,9,10,15,16,18,22,25; 11.7/8,36,37; Chapter 11 Review/32,42; Cspk. p.233/1-2
Lab:	21-Apr	11.6	Applications and Modeling	Cspk. p.235/3-4, finish 15-3 review
15-3	22-Apr		Review	11.6/20,26-30; 11.7/35,39; Chapter 11 Review/26
16-1	25-Apr		Test 4	
16-2	27-Apr		TCE	

Updated 01/08/16

1.7/24->32; Chapter 1 Check Your Understanding/12->1.5/61; 13->1.5/62; 14->

3.5/9->12; 10->13; 11->14; 15->18; 16->19; 18->22; 28->32; 29->34; 36->42; 4
28->27; 29->28; 30->29; 31->30

15->22; 16->Chapter 3 Review/28; 17->24; 18->25; 21->28; 23->30; 24->31; 25->

3.5/19->23; 21->25; 25->29; 27->31; 47->59; 48->60; 3.6/55->64; 63->72; 4.2/1

6.3/17->14; 23->21; 26->29; 6.5/1 missing; 3 missing; 4->6.3/30; 5->6.3/31; 6->

1.5/14->10; 17->13; 19->15; 21->17; 22->18; 25->21; 29->28; 32->31; 34->32;

48

1->2; 2->3; 3->4; 4->5; 5->7; 8->6; 9->8; 12->9; 13->10; 14->12; 15->Chapter 5
5.1/6->13; 7->14; 5.2/1->3; 2->4; 22->37

3->Chapter 5 Review/3; 7->11; 8->13; 9->12; 10->14; 14->19; 23->38; 29->35;

1->6; 3->7; 4->5.2/15; 5->5.2/17; 6->5; 14->19; 15->18; 16->22; 17->21; 29->41
5.2/15->23; 16->22; 19->25; 20->27; 21->28; 27->33; 6.2/53 12

14->20; 17->22; 22->5.1/23; 23->28; 24->29; 25->30; 29->35

1->Chapter 5 Review/29; 2->Chapter 6 Review/1; 3->Chapter 6 Review/2; 4->1
5->8; 6->5; 7->6; 8->7; 10->11; 11->12; 12->13; 13->14; 25->26; 37->Chapter 6

1->7; 2->8; 3->9; 4->10; 5->13; 6->14; 7->11; 8->12; 9->15; 10 missing; 16->4;

3->4; 13->14; 36->39; 37->40; 49->51; 59->Chapter 7 Review/121; 61->63; 64-
23->24; 28->30; 33->35; 38->40; 59->67

7.1/13->14; 31->32; 57->59; 69->71; 71->73

50->49; 51->50; 52->51; 53->52; 54->53; 55->54; 56->55; 57->56; 58->57; 59->

Chapter 5 Review/22->5.4/24; 25->5.4/30; 27->5.4/29; 30->5.3/26; 35->5.4/34;

1->7.6/1; 2->7.6/2; 5->7.6/5; 6->7.6/6; 9->7.6/9; 10->7.6/10; 11->7.6/11; 12->7.6/12; 13->7.6/13; 14->7.6/14; 15->Chapter 7 Review/140; 16->7.6/16; 17->7.6/17; 18->7.6/18

1->4; 2->5; 3->6; 4->10; 5->11; 7->13; 9->15; 10->16

1->11.5/1; 2->11.6/1; 3->1; 7->5; 8->16; 16->22; 20->Chapter 11 Review/1; 21->11.5/1; 1->6; 4->8; 5->9; 7->15; 8->13; 9->14; 11->16; 12->17; 13->Chapter 11 Review/1; 14->11.5/1; 15->11.6/1; 1->7; 3->9; 4->8; 6->14; 12->17
2->3; 4->5; 5->13; 17->18; 18->19; 19->20; 20->21; 21->22; 22->23; 23->24; 24->25; 25->26; 26->27; 27->28; 28->29; 29->30; 30->31; 31->32; 32->33; 33->34; 34->35; 35->36; 36->37; 37->38; 38->39; 39->40; 40->41; 41->42; 42->43; 43->44; 44->45; 45->46; 46->47; 47->48; 48->49; 49->50; 50->51; 51->52; 52->53; 53->54; 54->55; 55->56; 56->57; 57->58; 58->59; 59->60; 60->61; 61->62; 62->63; 63->64; 64->65; 65->66; 66->67; 67->68; 68->69; 69->70; 70->71; 71->72; 72->73; 73->74; 74->75; 75->76; 76->77; 77->78; 78->79; 79->80; 80->81; 81->82; 82->83; 83->84; 84->85; 85->86; 86->87; 87->88; 88->89; 89->90; 90->91; 91->92; 92->93; 93->94; 94->95; 95->96; 96->97; 97->98; 98->99; 99->100; 100->101; 101->102; 102->103; 103->104; 104->105; 105->106; 106->107; 107->108; 108->109; 109->110; 110->111; 111->112; 112->113; 113->114; 114->115; 115->116; 116->117; 117->118; 118->119; 119->120; 120->121; 121->122; 122->123; 123->124; 124->125; 125->126; 126->127; 127->128; 128->129; 129->130; 130->131; 131->132; 132->133; 133->134; 134->135; 135->136; 136->137; 137->138; 138->139; 139->140; 140->141; 141->142; 142->143; 143->144; 144->145; 145->146; 146->147; 147->148; 148->149; 149->150; 150->151; 151->152; 152->153; 153->154; 154->155; 155->156; 156->157; 157->158; 158->159; 159->160; 160->161; 161->162; 162->163; 163->164; 164->165; 165->166; 166->167; 167->168; 168->169; 169->170; 170->171; 171->172; 172->173; 173->174; 174->175; 175->176; 176->177; 177->178; 178->179; 179->180; 180->181; 181->182; 182->183; 183->184; 184->185; 185->186; 186->187; 187->188; 188->189; 189->190; 190->191; 191->192; 192->193; 193->194; 194->195; 195->196; 196->197; 197->198; 198->199; 199->200; 200->201; 201->202; 202->203; 203->204; 204->205; 205->206; 206->207; 207->208; 208->209; 209->210; 210->211; 211->212; 212->213; 213->214; 214->215; 215->216; 216->217; 217->218; 218->219; 219->220; 220->221; 221->222; 222->223; 223->224; 224->225; 225->226; 226->227; 227->228; 228->229; 229->230; 230->231; 231->232; 232->233; 233->234; 234->235; 235->236; 236->237; 237->238; 238->239; 239->240; 240->241; 241->242; 242->243; 243->244; 244->245; 245->246; 246->247; 247->248; 248->249; 249->250; 250->251; 251->252; 252->253; 253->254; 254->255; 255->256; 256->257; 257->258; 258->259; 259->260; 260->261; 261->262; 262->263; 263->264; 264->265; 265->266; 266->267; 267->268; 268->269; 269->270; 270->271; 271->272; 272->273; 273->274; 274->275; 275->276; 276->277; 277->278; 278->279; 279->280; 280->281; 281->282; 282->283; 283->284; 284->285; 285->286; 286->287; 287->288; 288->289; 289->290; 290->291; 291->292; 292->293; 293->294; 294->295; 295->296; 296->297; 297->298; 298->299; 299->300; 300->301; 301->302; 302->303; 303->304; 304->305; 305->306; 306->307; 307->308; 308->309; 309->310; 310->311; 311->312; 312->313; 313->314; 314->315; 315->316; 316->317; 317->318; 318->319; 319->320; 320->321; 321->322; 322->323; 323->324; 324->325; 325->326; 326->327; 327->328; 328->329; 329->330; 330->331; 331->332; 332->333; 333->334; 334->335; 335->336; 336->337; 337->338; 338->339; 339->340; 340->341; 341->342; 342->343; 343->344; 344->345; 345->346; 346->347; 347->348; 348->349; 349->350; 350->351; 351->352; 352->353; 353->354; 354->355; 355->356; 356->357; 357->358; 358->359; 359->360; 360->361; 361->362; 362->363; 363->364; 364->365; 365->366; 366->367; 367->368; 368->369; 369->370; 370->371; 371->372; 372->373; 373->374; 374->375; 375->376; 376->377; 377->378; 378->379; 379->380; 380->381; 381->382;

13->14; 14->15; 15->16; 29->34; 30->35; 31->36; 32->37; 34->39; 36->41
Chapter 7 Review/51->50; 56->55; 71->68; Chapter 11 Review/1->11.2/18; 11-:

1->2; 2->Chapter 11 Review/3; 3->7; 4->9; 6->4; 12->Chapter 11 Review/35; 16->11; 17->10; 18->13; 19->14; 20->Chapter 11 Review/15; 21->16; 22->17; 23->18; 24->19; 25->20; 26->21; 27->22; 28->23; 29->24; 30->25; 31->26; 32->27; 33->28; 34->29; 35->30; 36->31; 37->32; 38->33; 39->34; 40->35; 41->36; 42->37; 43->38; 44->39; 45->40; 46->41; 47->42; 48->43; 49->44; 50->45; 51->46; 52->47; 53->48; 54->49; 55->50; 56->51; 57->52; 58->53; 59->54; 60->55; 61->56; 62->57; 63->58; 64->59; 65->60; 66->61; 67->62; 68->63; 69->64; 70->65; 71->66; 72->67; 73->68; 74->69; 75->70; 76->71; 77->72; 78->73; 79->74; 80->75; 81->76; 82->77; 83->78; 84->79; 85->80; 86->81; 87->82; 88->83; 89->84; 90->85; 91->86; 92->87; 93->88; 94->89; 95->90; 96->91; 97->92; 98->93; 99->94; 100->95; 101->96; 102->97; 103->98; 104->99; 105->100; 106->101; 107->102; 108->103; 109->104; 110->105; 111->106; 112->107; 113->108; 114->109; 115->110; 116->111; 117->112; 118->113; 119->114; 120->115; 121->116; 122->117; 123->118; 124->119; 125->120; 126->121; 127->122; 128->123; 129->124; 130->125; 131->126; 132->127; 133->128; 134->129; 135->130; 136->131; 137->132; 138->133; 139->134; 140->135; 141->136; 142->137; 143->138; 144->139; 145->140; 146->141; 147->142; 148->143; 149->144; 150->145; 151->146; 152->147; 153->148; 154->149; 155->150; 156->151; 157->152; 158->153; 159->154; 160->155; 161->156; 162->157; 163->158; 164->159; 165->160; 166->161; 167->162; 168->163; 169->164; 170->165; 171->166; 172->167; 173->168; 174->169; 175->170; 176->171; 177->172; 178->173; 179->174; 180->175; 181->176; 182->177; 183->178; 184->179; 185->180; 186->181; 187->182; 188->183; 189->184; 190->185; 191->186; 192->187; 193->188; 194->189; 195->190; 196->191; 197->192; 198->193; 199->194; 200->195; 201->196; 202->197; 203->198; 204->199; 205->200; 206->201; 207->202; 208->203; 209->204; 210->205; 211->206; 212->207; 213->208; 214->209; 215->210; 216->211; 217->212; 218->213; 219->214; 220->215; 221->216; 222->217; 223->218; 224->219; 225->220; 226->221; 227->222; 228->223; 229->224; 230->225; 231->226; 232->227; 233->228; 234->229; 235->230; 236->231; 237->232; 238->233; 239->234; 240->235; 241->236; 242->237; 243->238; 244->239; 245->240; 246->241; 247->242; 248->243; 249->244; 250->245; 251->246; 252->247; 253->248; 254->249; 255->250; 256->251; 257->252; 258->253; 259->254; 260->255; 261->256; 262->257; 263->258; 264->259; 265->260; 266->261; 267->262; 268->263; 269->264; 270->265; 271->266; 272->267; 273->268; 274->269; 275->270; 276->271; 277->272; 278->273; 279->274; 280->275; 281->276; 282->277; 283->278; 284->279; 285->280; 286->281; 287->282; 288->283; 289->284; 290->285; 291->286; 292->287; 293->288; 294->289; 295->290; 296->291; 297->292; 298->293; 299->294; 300->295; 301->296; 302->297; 303->298; 304->299; 305->300; 306->301; 307->302; 308->303; 309->304; 310->305; 311->306; 312->307; 313->308; 314->309; 315->310; 316->311; 317->312; 318->313; 319->314; 320->315; 321->316; 322->317; 323->318; 324->319; 325->320; 326->321; 327->322; 328->323; 329->324; 330->325; 331->326; 332->327; 333->328; 334->329; 335->330; 336->331; 337->332; 338->333; 339->334; 340->335; 341->336; 342->337; 343->338; 344->339; 345->340; 346->341; 347->342; 348->343; 349->344; 350->345; 351->346; 352->347; 353->348; 354->349; 355->350; 356->351; 357->352; 358->353; 359->354; 360->355; 361->356; 362->357; 363->358; 364->359; 365->360; 366->361; 367->362; 368->363; 369->364; 370->365; 371->366; 372->367; 373->368; 374->369; 375->370; 376->371; 377->372; 378->373; 379->374; 380->375; 381->376; 382->377; 383->378; 384->379; 385->380; 386->381; 387->382; 388->383; 389->384; 390->385; 391->386; 392->387; 393->388; 394->389; 395->390; 396->391; 397->392; 398

11.6/2->9; 4->8; 13->18; 15->16; 16->Chapter 11 Review/42; 18->15; 22 missir

Chapter 11 Review/35->26; 39 missing; 40 missing; 41->11.6/20; 48->11.7/39;

·1.5/63; 15->1.5/64; 16->1.5/65; 17->1.5/66; 18->1.5/67; 19->1.5/68; 20->1.5/69

1->50; 42->52; 53->66; 4.6/35->44; 36->45

5->33; 31->39; 33->41; 39->44; 45->51

15->13; 4.4/3->Chapter 4 Review/63; 9->4.3/36; 47->4.3/43; 4.6/45->50

·6.3/32; 7->6.3/33

46->36; Chapter 1 Review/28->22; 29->23; 35->33; 68->1.5/38; 72->1.5/51; Cr

5 Review/2; 16->15; 27->25

30->40; 31->29; 32->30; 33->31; 34->44

0; 32->5.1/22

13; 6->15; 7->16; 8->17; 9->18; 10->19; 15->5.3/12; 18->Chapter 5 Review/30; 19
5 Review/6; 42->Chapter 6 Review/13; 48->Chapter 6 Review/17; 49->Chapter

26->24; 27->25; 28->26; 29->Chapter 6 Review/73; 30->36; 31->35; 32->37

·>66; 75->77; 76->78

>7.1/34; 60->58

25-25->26-28->1-33->38

6/29->30; 11.7/25->35

11.6/29->30; 11.7/25->35

)

Chapter 3 Review/10->3.6/20; 14->15; 15->16; 16->17; 17->18; 19->20; 24->25; 3

21->1; 22->2; 23->3; 24->4; 25->5; 28->Chapter 5 Review/32; 29->Chapter 5 R
6 Review/8; 50->Chapter 6 Review/18; 51->Chapter 6 Review/16; 52->Chapter

; 3->6.2/37; 4->6.2/38; 5->6.2/39; 6->6.2/40; 7->6.2/41; 10->6.2/46; 11->6.2/47;

!8->7.6/27; 30->7.6/29; 31->7.6/30; 32->7.6/31; 38->7.6/36
4->7.6/33; 36 missing

3 missing

>36; 31->37

31->32; 32->33; 33->34; 34->35; 35->36; 36->37; 67->66; 76->3.7/21; 78->77; 9

view/33; 30->Chapter 5 Review/34; 31->Chapter 5 Review/35; 32->36; 33->C
6 Review/20

; 12->6.2/49; 13->21; 14->25; 15 missing; 16 missing; 17 missing; 31 missing; 3

96->95; 98->97; 99->98; 111 missing; 113->112

Chapter 5 Review/36; 34->37; 35->38

i2->30; 33->31; 34->32; 35->33; 36->34; 37->35; 38 missing; 43->6.2/67; 49->6

6.2/75; 50->6.2/76; 51->6.2/77; 58 missing; 61 missing; 67 missing; 71 missing

