

TIGP Course Schedule for 2017 Fall Semester

Please click on the course for detailed information.

Day	Time	Monday	Tuesday	Wednesday	Thursday	Friday
Morning	9:00 ~	9:00-12:00 Elementary Chinese Class	9:00-12:00 (Bio) Basic Molecular Biology I	9:00-12:00 (ESS) Introductory Earth System Science	09:00-11:00 (MCB) Seminar in Molecular and Cell Biology	9:00-12:00 (BIO) Programming (Python)
		9:00-12:00 (ESS) Atmospheric Chemistry and Climate Changes	09:10-12:10 (BIODIV) Population Genetics and Evolution	9:00-12:00 (SCST) Introduction to Sustainable Chemical Science and Technology I	9:00-12:00 (Bio) Fundamental Statistical Methods in Bioinformatics	9:10-12:00 (MST) Irreversible Thermodynamics and its Application in spin caloritronics
				09:10-12:00 (MST) Quantum Optics	9:00-12:00 (SNHCC) Data Mining in Social Networks	
				09:30-12:30 (DPTM) Translational Medicine	9:00-12:00 (SCST) Advances in Crystal Science and Engineering	
	10:00 ~	10:00-11:50 (MCB) Molecular and Cell Biology	10:00-12:00 (MBAS) Special Topics: Bacterial protein secretion systems	10:00-12:00 (SNHCC) Probability and Statistics		10:10-12:00 (INS) Introduction of Research Techniques in Neuroscience
			10:00-12:00 (ESS) Isotope Geochemistry	10:20-11:10 (BIODIV) Seminar		10:20-12:10 (CBMB) Discovery Course in Science Communication
			10:10-12:00 (DPCBDD) Molecular Cancer Biology			
			10:20-13:10 (NANO) Quantum Mechanism (I)			
Day	Time	Monday	Tuesday	Wednesday	Thursday	Friday
Afternoon	13:00 ~	13:20-15:10 (CBMB) Discussion in Advanced Chemical Biology (I)	13:20-15:10 (NANO) Advanced Physical Chemistry (I)	13:00-14:00 (ESS) Seminar and Research Discussion	13:20-15:10 (CBMB) Discussion in Advanced Chemical Biology (I)	13:20-16:20 (NANO) Introduction to Nanotechnology A
		13:30-16:30 (MST) Special topics on Molecular Science and Technology	13:30-15:20 (MM) Experimental Approaches in Molecular Medicine	13:20-16:20 (SCST) Molecular Spectroscopy	13:20-16:20 (SCST) Linear Algebra for Scientist	
		13:30-16:30 (NANO) Introduction to Nanotechnology B		13:20-16:20 (NANO) Advanced Inorganic Chemistry (I)		
				13:30-16:30 (INS) Introduction to Neuroscience		
	14:00 ~	14:00-17:00 (MBAS) Advanced Animal Biology	14:00-17:00 (MBAS) Advanced Plant Biology	14:00-16:00 (CBMB) Cryo- Electron Microscopy: theory and practice (I)	14:00-15:30 (Bio) Seminar (Faculty Presentation)	14:00-17:00 Elementary Chinese Class
			14:00-17:00 (ESS) Seismic Data Analysis	14:00-16:00 (SNHCC) Seminar	14:10-17:00 (Nano) Solid-state Physics	14:00-17:00 (Bio) Biological Computing
			14:20-17:20 (BIODIV) Biodiversity	14:10-16:00 (Nano) Seminar	14:20-17:20 (BIODIV) Biostatistics	14:20-16:20 (MST) Modern Experimental Techniques- Physics
				14:20-16:20 (Nano) Fundamentals and Application of Synchrotron Radiation and Neutron Scattering	14:30-16:20 (MCB) Molecular and Cell Biology	
				14:00-17:00 (ESS) General Geophysics		
				14:30 - 16:30 (SCST) Seminar		
	15:00 ~	15:30-17:20 (MCB) Experimental Approaches in Molecular and Cell Biology	15:30-17:30 (MST) Seminars I, II, III		15:30-17:00 (Bio) Student Presentation	
			15:30-17:30 (MST) Seminar of Molecular Science and Technology		15:30-17:00 (MST) Colloquium	
			15:30-18:20 (NANO) Applied Optics		15:30-17:00 (MST) Colloquium I, II	
	16:00 ~				16:30-17:20 (SCST) Seminar on Instrumental Analysis I	
	18:00 ~				18:30-19:20 (SCST) Seminar on Instrumental Analysis I	

Chinese Courses

No.	Course Name	Required or Elective	Credit	Coordinator	Course Information	Semester Dates	Building(Location)
1	Elementary Chinese Class	Required for foreign students	0	Ms. Chi	Monday 9:00~12:00	9/11~ 1/22	Room 207, TIGP Building 2F
2	Elementary Chinese Class	Required for foreign students	0	Ms. Haung	Friday 14:00~17:00	9/15~ 1/12	Room 207, TIGP Building 2F

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Translational Medicine

No.	Course Name	Required or Elective	Credit	Coordinator	Course Information	Semester Dates	Building(Location)
1	Translational Medicine (轉譯醫學)		3	Patrick C.H. Hsieh	Wednesday 09:30-12:30	9/13~ 1/10	B1B, Institute of Biomedical Sciences Building, AS

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Cancer Biology and Drug Discovery

No.	Course Name	Required or Elective	Credit	Coordinator	Special Requirements	Course Information	Semester Dates	Building(Location)
1	Molecular cancer biology (分子癌症生物學)		2	Dr. Shen, Chen-Yang		Tuesday 10:10-12:00	9/12~ 1/9	211 Room, 2F, TIGP Building

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CBMB

For the most up-to-date information, please refer to: <http://proj1.sinica.edu.tw/~tigpcbmb/courses.htm>

No.	Course Name	Required or Elective	Credit	Coordinator	Special Requirements	Course Information	Semester Dates	Building(Location)
1	Discussion in Advanced Chemical Biology (I)	Required	4	Dr Huan-Ching Tai	Required for all CBMB students	Mondays: 13:20 to 15:10pm Thursdays: 13:20pm to 15:10pm	9/11-1/11	Room 121, Department of Chemistry, NTU
2	Research skill and practice: NMR spectroscopy	Elective	2	Dr Danny Hsu	Email Dr Shang-Te Danny Hsu <hsushangte@gmail.com> for approval before selecting this course	TBD	TBD	TBD
3	Cryo-Electron Microscopy: theory and practice (I)	Elective	2	Dr Wei-Hau Chang		Wednesdays: 14:00-16:00	9/13-1/10	Rm 102, IBC
4	Discovery Course in Science Communication	Elective	2	Dr Cindy Lee		Fridays:10:20-12:10	9/15	N101, Institute of Biochemical Sciences, NTU

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MST

For the most up-to-date information, please refer to: <http://tigp.iams.sinica.edu.tw/>

No.	Course Name	Required or Elective	Credit	Coordinator	Course Information	Semester Dates	Building(Location)
1	Seminar of Molecular Science and Technology (分子科學與技術書報討論)	Required	1	Yuh-Lin Wang	Tuesday 15:30-17:30	2017/9/12~ 2018/1/9	Room 311, Institute of Atomic and Molecular Sciences, NTU
2	Colloquium (專題演講)	Required	0	Chi-Kung Ni	Thursday 15:30~17:00	2017/9/14~ 2018/1/11	Don't need to attend the class, Just hand in Seminar reports in course "Seminar of Molecular Science and Technology" 1. pass 4 semesters are required for students admitted to the Ph.D. program with master degree, starting from the first Ph.D. year. 2.Pass 6 semesters are required for students admitted to the program with bachelor degree. 2 semesters colloquium course are in the master year (i.e. first year) before applying for Ph.D. The rest 4 are in Ph.D year, starting from the first Ph.D. year.
3	Special topics on Molecular Science and Technology (分子科學與技術專題研究)	Required	3	Yuh-Lin Wang	Monday 13:30-16:30	2017/9/11- 2018/1/8	Room 311, Institute of Atomic and Molecular Sciences, NTU
4	Irreversible Thermodynamics and its Application in spin caloritronics (不可逆熱力學及其應用) (中央,清大及台大及他校滿5人才開課)	Elective	3	Dah-Yen Yang	Friday 9:10-12:00	2017/9/15~ 2018/1/12	Room 311, Institute of Atomic and Molecular Sciences, NTU
5	Modern Experimental Techniques-Physics (現代實驗技術-物理)	Elective	2	Jim Lin Ker-Jar Song Juen-Kai Wang Jyhpyng Wang	Friday 14:20-16:20	2017/9/15~ 2018/1/12	Room 311, Institute of Atomic and Molecular Sciences, NTU
6	Quantum Optics (量子光學)	Elective	3	Ying-Cheng Chen Ming-Shien Chang Yu-Ju Lin	Wednesday 9:10-12:00	2017/9/13~ 2018/1/10	Room 311, Institute of Atomic and Molecular Sciences, NTU
7	Seminars I, II, III (書報討論I, II, III)	Required	2	Yuh-Lin Wang	Tuesday 15:30-17:30	2017/9/12~ 2018/1/9	Room 311, Institute of Atomic and Molecular Sciences, NTU
8	Colloquium I, II (專題演講I, II)	Required	0	Szu-Yuan Chen	Thursday 15:30~17:00	2017/9/14~ 2018/1/11	Dr. Poe Lecture Hall, Institute of Atomic and Molecular Sciences, NTU

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MBAS

For the most up-to-date information, please refer to:

<http://abrc.sinica.edu.tw/mbas/>

No.	Course Name	Required or Elective	Credit	Coordinator	Course Information	Semester Dates	Building(Location)
1	Advanced Animal Biology (動物生物學特論)	core	3	Dr. Yi-Hsien Su (ICOB)	Monday 14:00-17:00	9/11-1/15	A236, 2F, Agricultural Technology building
2	Advanced Plant Biology (植物生物學特論)	core	3	Dr. Guang-Yuh Jauh (IPMB)	Tuesday 14:00-17:00	9/12-1/16	A236, 2F, Agricultural Technology building
2	Special Topics: Bacterial protein secretion systems (專題討論一)	Elective	2	Dr. Erh-Min Lai (IPMB)	Tuesday 10:00-12:00	9/12-1/17	A236, 2F, Agricultural Technology building

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MCB

For the most up-to-date information, please refer to: <http://www.imb.sinica.edu.tw/mcb/study.php#courses>

No.	Course Name	Required or Elective	Credit	Coordinator	Special Requirements	Course Information	Semester Dates	Building(Location)
1	Molecular and Cell Biology (細胞與分子生物學)	Required	4	Hsou-min Li	required for MCB and MM students	Monday 10:00-11:50 Thursday 14:30-16:20	9/11~12/18	R123, Institute of Molecular Biology, Academia Sinica
2	Experimental Approaches in Molecular and Cell Biology (分子與細胞生物學原理與技術)	Elective	2	Nan-Shih Liao	30 persons at maximal	Monday 15:30-17:20	9/11~12/25	R123, Institute of Molecular Biology, Academia Sinica
3	Seminar in Molecular and Cell Biology (專題討論)	Required	1	Liu-Yow Chen Shen-Ju Chou Sheng-Hong Chen Chia-Yang Shiau	MCB students only	Thursday 09:00-11:00	9/11~12/14	R123, Institute of Molecular Biology, Academia Sinica

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BIO

For the most up-to-date information, please refer to: <http://tigppb.iis.sinica.edu.tw/tigppbio/2017Fall.html>

No.	Course Name	Required or Elective	Credit	Coordinator	Special Requirements	Course Information	Semester Dates	Building(Location)
1	Basic Molecular Biology I 基礎分子生物學 (一) B1	Required	3	Dr. Chang, Chuan-Hsiung		Tuesday 09:00-12:00	9/11-1/12	Room107, New Building of IIS, AS
2	Fundamental Statistical Methods in Bioinformatics (基礎生物資訊統計學) S1	Required	3	Dr. Yang, Hsin-Chou		Thursday 09:00-12:00	9/12-1/12	Room107, New Building of IIS, AS
3	Seminar (老師演講)	Required	1	Dr. Chun-Yen Lin, Dr. Chun-Yen Lin		Thursday 14:00-15:30	9/12-1/12	Room101, New Building of IIS, AS
4	Student Presentation (學生報告)	Required	1	Dr. Chang, Chuan-Hsiung		Thursday 15:30-17:00	9/12-1/12	Room101, New Building of IIS, AS
5	Programming (Python) 程式設計 P1	Required	2	Dr. John Wang		Friday 09:00-12:00	9/12-1/12	Room108, Old Building of IIS, AS
6	Biological Computing 基礎生物資訊統計學 C1	Required	3	Dr. Huai-Kuan Tsai		Friday 14:00-17:00	9/12-1/12	Room107, New Building of IIS, AS

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NANO

For the most up-to-date information, please refer to: http://www.phys.sinica.edu.tw/TIGP-NANO/Course/2017_Fall.html

No.	Course Name	Required or Elective	Credit	Coordinator	Special Requirements	Course Information	Semester Dates	Building(Location)
1	奈米科技導論 A Introduction to Nanotechnology A	Required	3	Pen-Cheng Wang	for physics background students	Friday 13:20-16:20	2017/9/15- 2018/1/12	Room 302, ESS, NTHU
2	奈米科技導論 B Introduction to Nanotechnology B	Required	3	Ker-Jar Song Tsy-Yan Yu	for chemistry and bio background students	Monday 13:30-16:30	2017/9/11- 2018/1/8	R311, IAMS
3	量子力學一 Quantum Mechanism (I)		3	Ching-Teh Li		Tuesday 10:20-13:10	2017/9/12- 2018/1/9	Room 618, Dept of Physics, NTU
4	固態物理一 Solid-state Physics		3	Chih-Hao Lee		Thursday 14:10-17:00	2017/9/14- 2018/1/11	P101, IoP, AS
5	同步輻射與中子散射的基礎與應用 Fundamentals and Application of Synchrotron Radiation and Neutron Scattering		2	Minn-Tsong Lin		Wednesday 14:20-16:20	2017/9/13- 2018/1/10	Dept of Physics, NTU
6	應用光學 Applied Optics		3	Kung-Hsuan Lin		Tuesday 15:30-18:20	2017/9/12- 2018/1/9	清大Delta台達209 Delta Building 209, NTHU
7	高等無機化學一 Advanced Inorganic Chemistry (I)		3	Kien Voon Kong		Wednesday 13:20-16:20	2017/9/13- 2018/1/12	Room 121 Dept of Chemistry, NTU
8	高等物理化學一 Advanced Physical Chemistry (I)		3	Yuan-Chung Cheng		Tuesday 13:20-15:10 Thursday 9:10-10:00	2017/9/12- 2018/1/11	Room 121 Dept of Chemistry, NTU
9	專題討論 Seminar	Required	1	Nano Faculty		Wednesday 14:10-16:00	2017/9/13- 2018/1/10	P101, IoP, AS

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MM

For the most up-to-date information, please refer to: <http://www.ibms.sinica.edu.tw/mmp/page/2-2.htm>

No.	Course Name	Required or Elective	Credit	Coordinator	Special Requirements	Course Information	Semester Dates	Building(Location)
1	Experimental Approaches in Molecular Medicine (分子醫學研究法)	Elective	2	Dr. Jr-Wen Shui 徐志文老師		Tuesday 13:30-15:20	TBA	8th floor, TIGP classroom, IBMS

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ESS

For the most up-to-date information, please refer to: <http://www.rcec.sinica.edu.tw/tigp-ess/schedule.html>

No.	Course Name	Required or Elective	Credit	Coordinator	Course Information	Semester Dates	Building(Location)
1	Introductory Earth System Science [3] 地球系統科學通論	Required Course for 1-yr students	3	Dr. Shih-Yu Lee, Dr. Wei-Liang Lee, Dr. Frederic Deschamps,	Wed 9:00-12:00	9/11~1/12	Room 1105A, 11th Floor, South Building, Humanities and Social Sciences Building, Academia Sinica
2	Seminar and Research Discussion I [1] 書報討論I	Required Course for 1-yr students	1	Dr. Shih-Yu Lee, Dr. Yi-Chia Hsin, Dr. Frederic Deschamps,	Wed 13:00-14:00	9/11~1/12	Room 1105A, 11th Floor, South Building, Humanities and Social Sciences Building, Academia Sinica
3	General Geophysics [3] 地球物理學	Core Course (Solid earth sciences)	3	Dr. How-Wei Chen, Dr. Eh Tan	Wed 14:00-17:00	9/11~1/12	Room 414A, Institute of Earth Sciences, Academia Sinica
4	Atmospheric Chemistry and Climate Changes [3] 大氣化學與氣候變遷	Core Course (Atmospheric sciences)	3	Dr. Charles C.-K. Chou	Mon 09:00-12:00	9/11~1/12	Room 1121, 11th Floor, South Building, Humanities and Social Sciences Building, Academia Sinica
5	Seismic Data Analysis [3] 地震資料分析	Elective Course	3	Dr. Wu-Cheng Chi	Tue 14:00-17:00	9/11~1/12	Room 511A, Institute of Earth Sciences, Academia Sinica
6	Isotope Geochemistry [2] 同位素地球化學	Elective Course	2	Dr. Kuo-Lung Wang	Tue 10:00-12:00	9/11~1/12	Room 611A, Institute of Earth Sciences, Academia Sinica
7	Special Topics on Atmospheric Radiation [3] 大氣輻射專題特論	Elective Course	3	Dr. Chian-Yi Liu	To Be Confirmed	9/11~1/12	R3-110, Center for Space and Remote Sensing Research, National Central University

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BIODIV

For the most up-to-date information, please refer to: <http://biodiv.sinica.edu.tw/TIGP-BP/index.php?page=course>

No.	Course Name	Required or Elective	Credit	Coordinator	Special Requirements	Course Information	Semester Dates	Building(Location)
1	Population Genetics and Evolution 族群遺傳與演化	Required	3	John Wang Ryuji Machida		Tuesday 09:10-12:10	9/11~1/9	Room B204, BRC, AS
2	Biodiversity 生物多樣性	Elective	3	Allen Chen Kuo-Fang Chung		Tuesday 14:20-17:20	9/11~1/9	Room B208, BRC, AS
3	Biostatistics 生物統計學	Elective	3	Pei-Jen Lee Shaner Mao-Ning Tuanmu		Thursday 14:20-17:20	9/14~1/11	Room Library 802, NTNU Gongguan Campus
4	Seminar 專題討論	Required	1	Kuo-Fang Chung		Wednesday 10:20-11:10	9/13~1/10	Room B208, BRC, AS

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INS

For the most up-to-date information, please refer to: <http://npas.programs.sinica.edu.tw/ins/curriculum.html>

No.	Course Name	Required or Elective	Credit	Coordinator	Course Information	Semester Dates	Building(Location)
1	Introduction to Neuroscience 神經科學概論	Required	3	Chih-Cheng Chen	Wednesday 13:30-16:30	9/13~1/10	RoomB100, Interdisciplinary building, AS
2	Introduction of Research Techniques in Neuroscience 神經科學研究技術簡介	Elective	2	Yun-Ru Ruby Chen Ya Hui Chou	Friday 10:10-12:00	9/22-1/12	RoomB100, Interdisciplinary building, AS

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SCST

For the most up-to-date information, please refer to: <http://tigg-scst.chem.sinica.edu.tw/index.php/course/courses>

No.	Course Name	Required or Elective	Credit	Coordinator	Course Information	Semester Dates	Building(Location)
1	Introduction to Sustainable Chemical Science and Technology I 永續化學科技導論 I	Required	3	Ito Chao	Wednesday AM09:00-12:00	2017/9/13- 2018/1/10	B105, IoC, AS 中研院化學所 B105
2	Seminar 書報討論	Required	1	Ito Chao	Wednesday 14:30-16:30	2017/9/13- 2018/1/10	B105, IoC, AS 中研院化學所 B105
3	Colloquium 專題演講	Required	1	Wei-Hau Chang			
4	Lab Rotation 實驗室實習	Required	0	SCST Faculty			
5	Seminar on Instrumental Analysis I 儀器分析專題討論I	Elective	1	Dr. Hsin-Yun HSU	Thursday 16:30-17:20 Thursday 18:30-19:20	2017/9/14- 2018/1/11	SB203, NCTU
6	Molecular Spectroscopy 分子光譜	Elective	3	Dr. Hirotsugu Hiramatsu	Wednesday 13:20-16:20	2017/9/13- 2018/1/10	SB202, NCTU
7	Linear Algebra for Scientist 線性代數	Elective	3	Dr. Henryk Witek	Thursday 13:20-16:20	2017/9/14- 2018/1/11	SB202, NCTU
8	Advances in Crystal Science and Engineering 結晶科學發展與應用	Elective	3	Dr. Teruki Sugiyama	Thursday AM09:00-12:00	2017/9/14- 2018/1/11	SB201, NCTU

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SNHCC

For the most up-to-date information, please refer to: <http://tiqpsnhcc.iis.sinica.edu.tw/curstudent.html>

No.	Course Name	Required or Elective	Credit	Coordinator	Course Information	Semester Dates	Building(Location)
1	Mobile Social Networks	Required	3	TBA	TBA	9/11~1/12	TBA
2	Data Mining in Social Networks	Required	3	Man-Kwan Shan	Thursday 0900-1200	9/11~1/12	Room O108, Institute of Information Science, AS
3	Seminar	Required	0	De-Nian Yang	Wednesday 1400-1600	9/11~1/12	Room N106 Institute of Information Science, AS
4	Probability and Statistics	Elective	0	Ronald Chang	Wednesday 1000-1200	9/11~1/12	Room N107 Institute of Information Science, AS

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